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## LA MODELIZACIÓN COMO ENFOQUE DIDÁCTICO Y DE INVESTIGACIÓN EN TORNO A LA EDUCACIÓN CIENTÍFICA

## THE MODELLING IN SCIENCE AS A STRATEGY OF RESEARCH AND TEACHING INTERVENTION

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JOSÉ MARÍA OLIVA MARTÍNEZ\*, MARÍA DEL MAR ARAGÓN MÉNDEZ\*, NATALIA JIMÉNEZ-TENORIO\* & LOURDES ARAGÓN<sup>\*1</sup>

UNIVERSIDAD DE CÁDIZ\*

### RESUMEN

En este artículo se analizan, en primer lugar, algunas de las principales bases teóricas sobre las que se sustentan los enfoques de enseñanza de las ciencias centrados en los modelos, desde tres planos distintos: el epistemológico, el cognitivo y el didáctico. A partir de dichas bases, se caracterizan, en segundo lugar, los enfoques de enseñanza mediante modelización, los cuales vienen convirtiéndose hoy día en referentes importantes en la enseñanza de las ciencias, tanto desde el punto de vista del desarrollo de nuevas estrategias didácticas, como desde la perspectiva de líneas de investigación emergentes en didáctica de las ciencias.

**Palabras clave:** modelos; modelización; estrategias didácticas; estrategia de investigación; línea de investigación.

### ABSTRACT

This article analyses in the first place, some of the main theoretical bases on which, approaches of science teaching focused models, are sustained. These theoretical bases are considered from three different dimensions: epistemological, psychological and educational. From these bases, secondly, teaching approaches by modelling, which are becoming today in important reference in science teaching, are characterized not only as the point of view of the development of new didactic strategies, but also the perspective of emerging research lines in science education.

**Key words:** models; modelling; didactics strategies; research strategy; line of investigation.

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<sup>1</sup> Email: lourdes.aragon@uca.es

## 1. Introducción

Para cualquiera que no haya trabajado en el campo de la modelización, puede resultar extraño que se identifique una línea de trabajo como tal, por cuanto las ciencias están hechas de modelos y gran parte de lo que los alumnos aprenden en las escuelas forman parte de los modelos de la ciencia escolar. Sin embargo, los enfoques de enseñanza-aprendizaje basados en modelos y las estrategias de enseñanza mediante modelización, vienen constituyendo hoy líneas de las más fecundas en didáctica de las ciencias, tanto desde el punto de vista de la investigación educativa como desde la perspectiva del desarrollo de propuestas didácticas. De ahí que resulte interesante demarcar esta línea de trabajo y analizar qué implicaciones tiene para la educación científica.

En el presente trabajo se pretende contribuir a dicha caracterización si bien conviene reconocer que no existe una línea clara divisoria entre la modelización y otros enfoques, ya que, de hecho, este tipo de planteamiento solapa con otros, como el de enseñanza por investigación en torno a problemas, el de cambio conceptual, o incluso los recientes enfoques y diseños educativos centrados en la enseñanza por competencias.

Para hacer demarcar lo que significa una enseñanza basada en modelos, intentaremos situar sus fundamentos en tres planos distintos, a saber: a) desde un punto de vista epistemológico, b) desde planteamientos de la psicología cognitiva, y c) desde una perspectiva didáctica. Consecuencia de este análisis, y fruto de la integración de los fundamentos planteados a lo largo de los tres planos, mostraremos y justificaremos el papel que hoy en día vienen jugando los enfoques de enseñanza mediante modelización en la enseñanza de las ciencias.

## 2. Fundamentos epistemológicos

Frente a la concepción de ciencia centrada en el positivismo lógico, basada en la observación y en el método científico como vía de descubrimiento de verdades objetivas, durante la segunda mitad del siglo XX surgieron autores como Kuhn (1971), Feyerabend (1973) o Lakatos (1983) que dieron lugar a lo que se ha llamado la corriente relativista de la nueva filosofía de la ciencia. Desde esta corriente, se considera que el conocimiento no es solo el producto de la actividad científica, sino también su punto de partida, dado que la observación y la experimentación están “cargadas” de teoría (Hanson, 1977). Las teorías que sostienen los científicos no son solamente previas a la observación y a la experimentación, sino que las condiciona, de modo que la interpretación de la realidad depende del marco de referencia que adopta el investigador. Desde esta posición, no existen verdades objetivas únicas, sino que las “verdades” dependen del consenso adoptado por la comunidad científica en un momento determinado, a través de lo que Kuhn denominaba “paradigmas” o Lakatos “programas de investigación”. En consecuencia, el conocimiento no es una copia ni una imagen de la realidad, sino una construcción sobre la base de presupuestos teóricos que sirven a la ciencia para dar sentido a la información que obtiene a través de la investigación.

Al lado de estas corrientes, han surgido otras, como la “pragmatista” o la “realista”, que en cierto modo vienen a situarse en posiciones intermedias entre aquellos dos extremos. Para la corriente “pragmatista”, uno de cuyos exponentes conocidos es Stephen Toulmin, no es del todo relevante centrar la atención en si el conocimiento científico es una imagen de semejanza o no respecto a la realidad, sino que lo que importa es que la ciencia sirva para resolver problemas que hagan avanzar al conocimiento y nos ayuden a resolver nuevos problemas (Toulmin, 1977).

Para los “realistas” se considera que el conocimiento sí tiene una correspondencia con la realidad, de forma que el conjunto de leyes, principios y teorías (el mundo de las ideas) constituyen en cierta forma una representación del mundo real. No obstante, algunos de los autores de esta corriente, como Ronald Giere, pueden considerarse como “realistas moderados”, en el sentido de considerar que, aunque el mundo posee una estructura global definida, esta es demasiado compleja para ser abarcada completamente desde ninguna representación que los humanos

puedan crear o comprender (Giere, 1999). Por ello, puede decirse que cuando una teoría científica se acepta, es porque una parte importante de sus elementos representan (en algún aspecto y en cierto grado) aspectos del mundo (Giere, 1988). Este realismo moderado, puede ser coherente con algunas de las premisas del marco constructivista ya que, al fin y al cabo, la ciencia de los científicos no es una copia exacta de la realidad, sino una construcción aproximada (Giere, 1999). No obstante, se aleja del constructivismo radical propio de muchos sociólogos de la ciencia postmodernos y relativistas.

Por tanto, la realidad no puede ser representada o, si se quiere, comprendida punto a punto, pero sí puede ser representada al menos parcialmente, o si se prefiere “modelizada”. Es en este sentido en el que hemos de situar la noción de “modelo” que utiliza Giere. Veamos algunos de sus presupuestos:

- El núcleo central de la actividad científica se encuentra en la elaboración y uso de modelos. Un modelo es una representación simplificada de la realidad, a medio camino entre las teorías y la realidad.
- Los modelos son construcciones humanas resultantes tanto de la experiencia individual como social.
- Algunos modelos son mejores que otros. Un modelo es útil en tanto funciona: sirve para interpretar hechos conocidos, para realizar predicciones que se comprueban y para resolver problemas.
- El trabajo científico consiste en contrastar los hechos del mundo con modelos: si se obtiene el resultado esperado, el modelo queda reforzado y, en el caso contrario, se debilita (Figura 1).

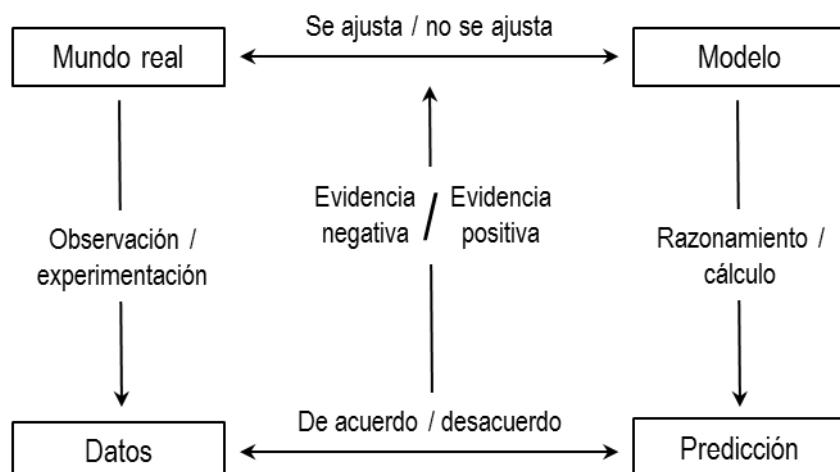


Figura 1. Papel de los modelos en el trabajo científico (Giere, 1999).

Desde esta perspectiva, las teorías adquirirían un sentido más amplio al de los modelos, estando constituidas además por enunciados teóricos (por ejemplo, definiciones y leyes) y ecuaciones y diagramas (que representan esos enunciados).

En suma, desde estas posiciones el foco de atención no se coloca por separado sobre el método científico o sobre la noción de paradigma, sino que se sitúa justamente en la intersección entre ambos, entendiendo que los modelos juegan dicho papel mediador a través de procesos de contrastación con la realidad, aspecto que tiene unas implicaciones como veremos para la práctica docente. Aun así, la idea de “método científico” puede seguir resultando válida, aunque desde otros presupuestos distintos, desde una perspectiva de racionalidad moderada y no desde bases positivistas (Izquierdo, 2000).

En este marco se contempla que los modelos juegan un papel esencial en la estructura y evolución de la ciencia y son parte integral del pensamiento y funcionamiento científico. Se trata

de elementos básicos a la hora de fundamentar, adecuar, flexibilizar y evaluar las explicaciones científicas (Halloun, 1996; Gilbert, Boulter y Rutherford, 1998). Harrison y Treagust (2000a) señalan que elaborar modelos y trabajar con ellos es la esencia de pensar y trabajar científicamente, y Gilbert (1993) afirma que la ciencia y sus modelos son inseparables porque los modelos son los productos de la ciencia y, a la vez, sus métodos y herramientas de trabajo.

Aunque el plano epistemológico resulta esencial para situar cualquier aprendizaje desde la especificidad del conocimiento científico, no resulta suficiente para fundamentar una perspectiva integral del aprendizaje basado en modelos. Más bien hemos de contemplarlo como un marco complementario con otros, entre ellos el de la psicología cognitiva, que puede ayudar a visualizar los mecanismos que operan en los procesos de génesis y uso de modelos y, sobre todo, durante el cambio en los modelos implicados.

### 3. Aportaciones de la psicología cognitiva

Los estudios sobre concepciones e ideas del alumnado fueron frecuentes en la década de los 80 y los 90 pero han sido objeto de críticas desde distintas instancias debido a la indefinición del marco teórico que los sustentaban. En unos casos se apelaba simplemente a su incompatibilidad con las teorías científicas del currículum escolar, en otros a su paralelismo con ideas surgidas en la historia de la ciencia, y finalmente en otros se justificaba su importancia a partir del paraguas genérico del constructivismo. No obstante, no parecía existir apenas soporte teórico a través del que orientar su estudio, más allá de la estimación de la distancia que separaba a esas concepciones espontáneas respecto al conocimiento escolar deseable. De ahí que algunos autores empezaran a ver en el marco de los “modelos mentales” de la psicología cognitiva un punto de referencia útil a la hora de fundamentar sus trabajos sobre ideas o concepciones de sentido común del alumnado, y su evolución o cambio hacia el punto de vista científico (Vosniadou, 1994).

Los modelos mentales son análogos estructurales del mundo que se manifiestan como representaciones internas al individuo que le permiten comprenderlo, al dotarle de capacidad para explicar hechos y realizar predicciones adelantándose a los acontecimientos (Johnson-Laird, 1983; Holland et al.; 1986; Pozo, 1989; Gutiérrez y Ogborn, 1992; Vosniadou, 1994; Greca y Moreira, 1998, 2000). Tienen, por tanto, para las personas una utilidad semejante –en el sentido metafórico- al que poseen los modelos de la ciencia para el científico, ya que se elaboran con objeto de comprender y predecir los sistemas físicos con los que se interactúa (Grosslight, Under, Jay y Smith, 1991; Greca y Moreira, 1998; Reiner y Gilbert, 2000; Solsona, Izquierdo y Gutiérrez, 2000). Surgen de la necesidad de dar sentido a una situación, un problema, una conversación con otra persona, una lectura, etc., tratándose por tanto del producto de la interacción del conocimiento previo con información proveniente del exterior (Perales y Jiménez, 2002).

Al contrario de lo que ocurre con otras formas de representación, como es el caso de los esquemas, que tienen una estructura más rígida y estable, los modelos mentales se consideran formas dinámicas y manipulables, basadas en un conocimiento tácito formado por creencias personales, reglas causales, imágenes visuales y otro tipo de representaciones permanentes archivadas en la memoria (Pozo, 1989; Reiner y Gilbert, 2000; Greca y Moreira, 2000; Vega, 2001a,b; Perales y Jiménez, 2002). En este sentido, pueden considerarse como mediadores entre una estructura cognitiva más estable y las experiencias con el mundo exterior. Por tanto, los modelos mentales son estructuras provisionales, en el sentido de que se elaboran para la ocasión aunque se constituyen a partir de información estable almacenada en la memoria a largo plazo del individuo.

Aunque existen distintas corrientes basadas en este tipo de representación, una de las más relevantes es la basada en las propuestas de Vosniadou para el aprendizaje de las ciencias (Vosniadou, 1994; Vosniadou y Brewer, 1994). Según dicha autora, la construcción de conocimiento no tiene lugar a través de la formación de conceptos aislados que luego se conectan

para formar estructuras más complejas. Por el contrario, los conceptos estarían embebidos desde la más tierna infancia en estructuras teóricas más amplias, las cuales servirían a los alumnos como instrumento para interaccionar con el medio externo que le rodea.

En general, se entiende que los modelos mentales son estructuras flexibles y dinámicas (Vosniadou, 1994), por cuanto, siendo el producto de la actividad cognitiva del alumno, se elaboran a través de un proceso de activación y toma de decisiones, en estrecha conexión con la especificidad del problema o fenómeno que se plantea y del contexto y formato de la tarea (Pozo, 1989). Se trata, pues, de un tipo de conocimiento que podría catalogarse como “situado” y “articulado”, que se genera para dar respuesta a problemas específicos, no pudiendo ser considerados, por lo general, como representaciones permanentes en su conjunto, aunque sí a través de sus partes. A pesar de ello, es posible que algunos modelos mentales que se generaron en el pasado, o parte de los mismos, se almacenen como estructuras separadas estables que pueden activarse “en bloque” mucho tiempo después, cuando se les necesita (Vosniadou, 1994).

Los modelos mentales se generan de manera lenta y gradual, pero coherente, en el intento de adaptar las creencias y presuposiciones epistemológicas y ontológicas del individuo con los datos e informaciones recibidas desde el exterior (Vega, 2001a). De ahí que presenten un cierto grado de estructuración, si bien su grado de coherencia interna y generalidad distan mucho de alcanzar los límites en los que se mueven los modelos en la Ciencia (Oliva, 1999).

Desde esta perspectiva, las ideas o concepciones pueden reinterpretarse en términos de modelos mentales usados por los individuos para interpretar fenómenos y situaciones del mundo real. En este contexto, la evolución de los modelos mentales puede entenderse como un cambio o evolución en las concepciones del alumnado. Así, sabemos que el aprendizaje se verifica mediante la construcción de nuevos modelos mentales y mediante la reconstrucción de los ya existentes para hacerlos más útiles (Gutiérrez y Ogborn, 1992; Vosniadou, 1994; Gutiérrez, 1996). Desde la perspectiva de autoras como Vosniadou (1994), el cambio conceptual podría interpretarse como una modificación progresiva en los modelos mentales que posee el sujeto, modificación que podría generarse por un proceso de enriquecimiento de información a partir de la estructura conceptual existente, o por una revisión o cambio de las creencias y presupuestos de partida. La forma más simple de cambio es el “enriquecimiento” de la estructura conceptual existente. El enriquecimiento consiste en la adición de información al marco teórico existente y resulta una forma de cambio relativamente cómoda y fluida. Como señala dicha autora, los alumnos no suelen tener dificultades para añadir hechos y atributos a su estructura conceptual existente, siempre y cuando estas informaciones no contradigan esas estructuras.

La “revisión”, por su parte, supondría una forma de cambio más compleja que podría efectuarse cuando la nueva información añadida es inconsistente con el conocimiento de partida. En estos casos, el cambio exigiría una transformación en el conocimiento tendente a eliminar las inconsistencias existentes. Un cambio de este tipo se puede dar, según Vosniadou, a dos niveles distintos de conocimiento: a un nivel específico o a un nivel estructural; siendo la revisión en el primer caso un proceso más sencillo que en el segundo.

El cambio en niveles estructurales de conocimiento sería más complejo porque ello implica un cambio profundo en los presupuestos y creencias más arraigadas, vinculadas a años de puesta a prueba y confirmación a través de la experiencia diaria. En tales circunstancias, no bastaría con cuestionar las respuestas que los alumnos dan a las preguntas o cuestiones que se les formula, en aras de sustituirlas por ideas más próximas al punto de vista científico. Más bien se trataría de ir a la raíz promoviendo un cambio en los supuestos conceptuales, epistemológicos y ontológicos que están en su base. Estas dos modalidades de cambio, aunque con matices, se aproximan bastante a los tipos de cambio apuntados por otros autores (Hewson, 1981; Posner et al., 1982; Carey, 1991; Chi 1992), y parecen ajustarse parcialmente a los procesos de acomodación y asimilación apuntados por Piaget.

Lo visto hasta aquí nos ayuda a entender la naturaleza de los modelos tanto en la ciencia como en el aprendizaje de las ciencias. A continuación, completamos la visión que nos ofrece la suma de estos dos planos por separado, abordando el problema desde un tercer punto de vista, como es el de la interacción entre modelos mentales y los modelos externos que se utilizan como referente el currículum escolar, situándonos pues justo en el marco que proporciona la educación formal.

#### 4. Fundamentos didácticos

La idea de modelo juega un papel central también hoy como unidad de conocimiento utilizado para conformar estándares de enseñanza-aprendizaje en el currículum escolar. Se utiliza con distintas acepciones y significados entre los que existen algunas conexiones importantes, pero también diferencias notables que conviene tener presente. A la hora de establecer diferencias utilizaremos como marco de análisis una adaptación del esquema de aprendizaje a través de modelos propuesto por Clement (2000), el cual ha sido expuesto ya en trabajos anteriores (Oliva, Aragón, Bonat y Mateo, 2003; Oliva-Martínez, Aragón y Jiménez-Tenorio, 2015a). Según Clement (2000), el aprendizaje consiste en la evolución sucesiva de los modelos del alumnado, adoptando como referente el modelo de la ciencia escolar. La continuidad entre modelos intuitivos y los modelos nuevos que se deben aprender puede producirse, según este autor, gracias a la existencia en el alumnado de concepciones iniciales útiles que pueden servir de anclaje de los nuevos modelos generados. Sobre este supuesto básico hemos incorporado dos ideas adicionales, configurando así nuestra propia perspectiva de aprendizaje a través de modelos que se expone en la figura 2.

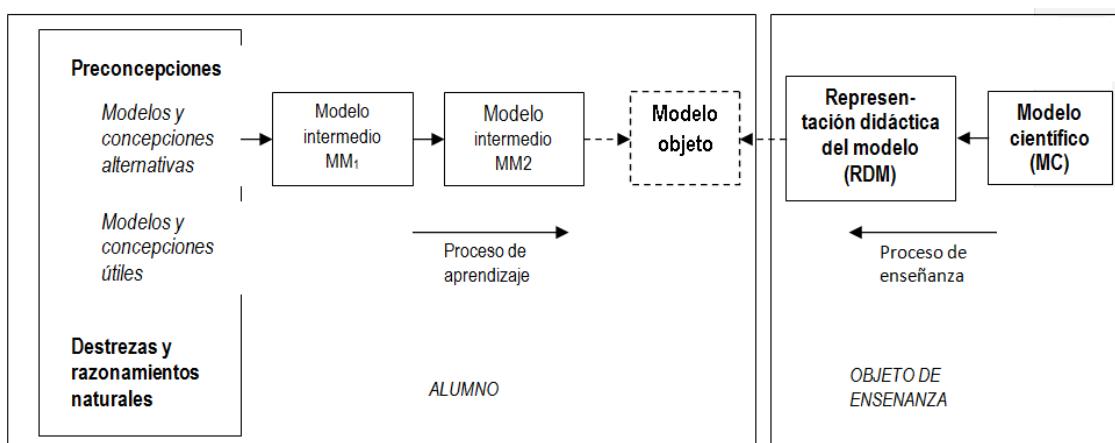


Figura 2. Los modelos en los procesos de enseñanza-aprendizaje (Oliva et al., 2003).

Nuestra primera aportación al esquema de Clement consiste en discernir entre conocimiento que es interno y externo al alumno (Marín, 2003) o, lo que es lo mismo, entre conocimiento del estudiante y conocimiento o contenido a enseñar. La segunda se refiere a la necesidad de diferenciar entre contenido científico y contenido escolar, considerando a este último como resultado de la transposición didáctica del primero y verdadero referente externo del aprendizaje.

Para tener en cuenta estas matizaciones, el esquema de la figura 2 integra algunas de las ideas aportadas por Greca y Moreira (2000) sobre diferencias entre modelos mentales (internos al individuo) y modelos conceptuales (externos al individuo). Así mismo incorpora la ya clásica distinción entre conocimiento científico y conocimiento escolar, que en este caso se traduce en la distinción entre modelos científicos -MC- y las representaciones didácticas de esos modelos – RDM- (Galagovsky y Adúriz-Bravo, 2001).

En el recuadro de la izquierda, etiquetado con la palabra alumno, los modelos que aparecen son modelos mentales (MM), que abarcan las representaciones internas de las que disponen los estudiantes acerca de un fenómeno o sistema dado, y que evolucionan con el tiempo, consecuencia del aprendizaje en el contexto escolar y también del que sucede en contextos no formales.

En el recuadro de la derecha, por su parte, los modelos que se incluyen son de tipo conceptual, al tratarse de conocimientos de tipo explícito y externo a los individuos, resultado del consenso alcanzado por las comunidades científicas y/o de educadores y divulgadores encargados de hacer llegar esa ciencia a los escolares o al público en general. Dentro de estos últimos hemos de distinguir los modelos científicos (MC), como conocimientos eruditos de alto nivel desarrollados por la ciencia, de sus representaciones didácticas (RDM), fruto de la transposición didáctica del conocimiento científico en conocimiento escolar (Galagovsky y Adúriz-Bravo, 2001). En sus distintas versiones, esas representaciones se utilizan para organizar la comprensión del alumno y como base para delimitar un conocimiento escolar deseable que sirve como punto de referencia externo (Justi y Gilbert, 2002).

Como se sugiere en la figura 2, la elaboración y evolución de los modelos mentales en el alumno no es el producto de un proceso de transmisión de significados, sino consecuencia de la evolución cognitiva que resulta de la interacción entre los modelos mentales del alumno y las representaciones didácticas de esos modelos (Gutiérrez y Ogborn, 1992; Vosniadou, 1994; Gutiérrez, 1996). En unas ocasiones, esas representaciones se proporcionan directamente, en formato declarativo, mediante una versión simplificada y adaptada a la edad del modelo científico. En otras, se presentan utilizando recursos e instrumentos retóricos que ayuden a su interiorización, por ejemplo mediante dibujos, maquetas, modelos mecánicos, metáforas, analogías, simulaciones digitales, paradojas, experimentos mentales, etc. Tales recursos constituyen también elementos distintivos de la enseñanza-aprendizaje de modelos en la educación científica. Así, por ejemplo, los modelos están íntimamente relacionados con los símiles o analogías, como también con el uso de maquetas y modelos a escala. En este sentido, los modelos están formados por analogías que buscan similitudes y diferencias entre la realidad y el objeto que lo representa. Por ejemplo, la teoría cinética de los gases se basa en el símil de las moléculas como "esferas rígidas", y para explicar el efecto de calentamiento global se recurre al concepto de aumento de "efecto invernadero". Es precisamente el símil entre el objeto real y el representado la que sirve de base para la elaboración de maquetas y otros tipos de representaciones a escalas, las cuales tienen también una base analógica.

Algunas veces el proceso de enseñanza-aprendizaje se reduce a procesos mediante los que el profesor o el libro de texto intentan ayudar a que los alumnos interioricen modelos ya hechos y acabados. Conviene tener en cuenta, en este sentido, la crítica que autores como Galagovsky y Adúriz-Bravo (2001) hacen de los modelos didácticos que se incluyen en la mayoría de textos, los cuales suelen tratarse de meras versiones simplificadas y descontextualizadas de los modelos científicos. No obstante, los enfoques más genuinos hoy de aprendizaje basado en modelos intentan implicar de forma activa al alumnado en la génesis y/o en la aplicación de esos modelos que se quieren enseñar, proceso o actividad que suele etiquetarse con el término de "modelización".

## **5. Del aprendizaje de modelos a los procesos y estrategias de modelización en la educación científica**

El aprendizaje basado en modelos viene constituyendo, como decíamos, un referente esencial de muchas de las nuevas propuestas de enseñanza-aprendizaje de las ciencias (Harrisson y Treagust, 2000b; Izquierdo y Adúriz Bravo, 2005), con al menos dos acepciones. Una de ellas se refiere al proceso de enseñar y aprender modelos del currículum escolar, dentro del contexto expuesto en el apartado anterior. La otra se vincula, además, con la posibilidad de conceder un

mayor protagonismo a los alumnos, de modo que éstos se impliquen también intensamente en la tarea de aplicarlos, revisarlos de manera crítica, y participar en la (re)construcción de nuevos modelos desconocidos para ellos en un principio (Justi y Gilbert, 2002). Todo lo cual viene a dar sentido al concepto acuñado bajo el término de “modelización”, como actividad que engloba de manera integral a toda esta variedad de perspectivas.

En la actualidad, son muchos los autores que consideran que modelizar es una pieza clave en la educación científica, por cuanto es capaz de aglutinar en torno a ella a la mayoría de competencias científicas que se promueven hoy dentro del currículo de ciencias, y además por su potencial para desarrollar estrategias de “aprender a aprender”. Hasta tal punto puede ser considerado esencial en el aprendizaje, que autores como Halloun (1996) consideran que aprender ciencia no implica sino aprender el juego de la modelización. En contraste con ello, casi nunca se suele dedicar espacio en la escuela a enseñar a los alumnos cómo construir modelos (Justi y Gilbert, 2002) y son pocos los trabajos que ofrecen pautas para la evaluación de la modelización en ciencias (Oversby, 1999).

La modelización constituye un proceso complejo cuyo desarrollo exige toda una gama de competencias (Lopes y Costa, 2007; Oliva, Aragón y Cuesta, 2015b; Jong, Chiu y Chung, 2015). Además de conocimiento sobre el dominio específico, involucra numerosas estrategias, destrezas y determinados compromisos epistemológicos (Grosslight et al., 1991; van Driel y Verloop, 1999; Harrison y Treagust, 2000b; Justi y Gilbert, 2002; Halloun, 2007; Prins et al., 2009).

Así, por una parte, diversos autores han aportado esquemas destinados a explicar los procesos de modelización (Justi y Gilbert, 2002; Prins, 2010) (Figura 3). Desde esta perspectiva, modelizar comporta toda una gama de procesos estrechamente relacionados con los componentes del ciclo de investigación científica: plantear problemas, formular hipótesis, buscar información, elaborar nuevas ideas y explicaciones, etc. Y ello demandaría también tareas como interpretar, manejar y expresar fenómenos y situaciones mediante cierta variedad de signos, ya sean de formato proposicional o icónico (Barsalou, 1999; Nersessian, 2002), ya que gran parte de la actividad científica consiste en el uso de distintos códigos y lenguajes y en la “traducción” de unos a otros (Keig y Rubba, 1993).

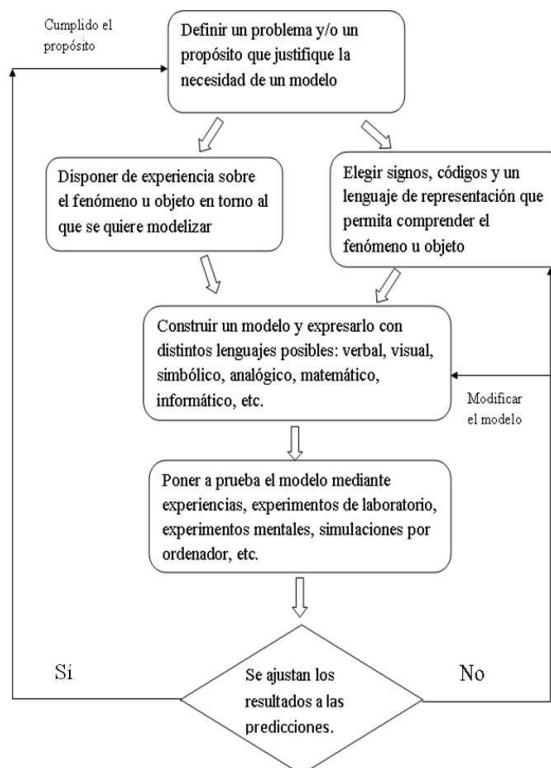


Figura 3. Adaptación del esquema modelización de Justi y Gilbert (2002) y Prins (2010).

Por otra parte, el trabajo con modelos implica la movilización de valores epistémicos en relación a la naturaleza de los mismos, como percibir el carácter racional de los modelos (Halloun, 1996), reconocer su papel en el desarrollo de hipótesis, explicaciones y argumentos científicos (Oversby, 1999), o también apreciar su utilidad y, a la vez, su carácter aproximativo, limitado y cambiante (Grosslight et al., 1991; Inghan y Gilbert, 1991; Ben-zvi y Gemut, 1998; Harrison y Treagust, 2000b). De ahí que los alumnos deban entender el rol de los modelos en las ciencias y en su aprendizaje (Treagust, Chittleborough y Mamiala, 2002), conocimiento que ha sido objeto de distintas denominaciones, como ‘epistemic knowledge’, ‘meta-modeling knowlede’, ‘epistemologies of models’, ‘metaconceptual modeling knowledge’ o ‘meta-representational competence’ (Schwarz, 2002). Por tanto, el trabajo explícito con los alumnos en torno a la naturaleza de los procesos de modelización constituye en sí mismo una forma de trabajar y reflexionar también en torno a la naturaleza de la ciencia. De hecho, algunos estudios desarrollados muestran un importante grado de relación entre las visiones de los sujetos en torno a la naturaleza de la ciencia y la comprensión de éstos sobre la naturaleza de los modelos (Raviolo, Ramírez, López y Aguilar, 2010; Vasques Brandão, Solano Araujo y Veit, 2015; Torres y Vasconcelos, 2017).

Como puede apreciarse, el razonamiento basado en modelos demanda toda una gama de habilidades y principios axiológicos deseables, y asimismo requiere de un proceso de aprendizaje y de práctica dentro de la cultura de clase (Treagust, Chittleborough y Mamiala, 2004). De ahí que la competencia de modelización dea entenderse como conjunto de conocimientos, habilidades, destrezas y valores necesarios para llevar a cabo la tarea de modelar en su dimensión más amplia (Justi y Gilbert, 2002), no solo se trataría de aprender los modelos de la ciencia escolar, sino también trabajar con ellos, elaborarlos y revisarlos, así como hablar y opinar acerca de los mismos, entendiendo su valor, su utilidad, su carácter aproximativo y cambiante y, también, sus limitaciones.

En consecuencia, un aspecto importante de la enseñanza de las ciencias debería ser enseñar a los alumnos la(s) competencia(s) necesaria(s) para la tarea de modelizar (Harrison y Treagust, 2000b; Justi y Gilbert, 2002; Izquierdo y Adúriz-Bravo, 2005; Chamizo, 2010; Camacho et al., 2012), dado que las mismas pueden ser desarrolladas mediante el proceso de enseñanza (Schwarz, 2002; Schwarz y White, 2005; Halloun, 2007; Prins et al, 2009; Mendonça y Justi, 2011; Madden, Jones y Rahm, 2011; Bamberger y Davis, 2013). Todo ello con el fin de enseñar a los alumnos a construir modelos (Justi y Gilbert, 2002), y promover a la vez habilidades y destrezas relacionadas con la indagación científica (Halloun, 2007) y el pensamiento crítico acerca de los conocimientos estudiados (Solbes, 2013 a,b).

Esta perspectiva se encuentra en sintonía con los trabajos de Hodson (1992) quien plantea la necesidad de que los alumnos aprendan “ciencias”, aprendan a “a hacer ciencias” y aprendan “acerca de la ciencia”. Ello se traduce en que los alumnos aprendan “modelos”, aprendan a “trabajar” con ellos, y aprendan “acerca” de los modelos aprendidos. Por tanto, la modelización abarcaría una componente práctica de modelización y otra de metaconocimiento (Nicolaou y Constantinou, 2014). La primera de ellas entendida como conjunto de habilidades y prácticas que permiten a una persona usar reflexivamente una variedad de representaciones, así como pensar, comunicarse y actuar sobre los fenómenos estudiados (Kozma y Russell, 1997) y la segunda como conocimiento epistémico y actividad metacognitiva que permite tanto gestionar el uso de diferentes modelos como oportunidad de percibir adecuadamente la naturaleza y el alcance de cada uno de ellos y la posibilidad de opinar acerca de los mismos (Schwarz, 2002; diSessa, 2004).

Cada una de estas dos componentes de la modelización ha sido analizada en cierta profundidad por separado a lo largo de la literatura, existiendo algunos estudios que intentan establecer conexiones entre ellas y entre las distintas dimensiones o factores que componen cada una. Así, aun cuando es difícil desentrañar empíricamente el conocimiento de los modelos del desempeño en la tarea de modelizar –habilidades para trabajar con ellos y conocimientos epistémicos acerca de los mismos- algunos estudios han intentado analizar la posible interrelación

entre esos elementos (Schwarz, 2002). Si bien los resultados obtenidos en estos estudios no son concluyentes, se aprecia suficiente evidencia que sugiere la existencia de puentes y conexiones entre todos estos elementos, apuntando hacia una cierta unidad de constructo.

De un lado, Justi y Gilbert (2002) establecían un avance progresivo en la capacidad de modelización que iba desde aprender los modelos de la ciencia escolar, hasta elaborar modelos nuevos. Concretamente, planteaban un esquema de progresión como el siguiente, en orden de menor a mayor complejidad: a) aprender modelos; b) aprender a usar modelos; c) aprender cómo revisar modelos; d) aprender a reconstruir modelos; e) aprender a construir modelos nuevos. Se supone que la competencia del estudiante ante cualquiera de estas tareas requeriría disponer de las capacidades que se necesitan para realizar las anteriores, de ahí la complejidad creciente de dicha gradación. Así, por ejemplo, en dicha jerarquía, el conocimiento de los modelos curriculares sería un paso previo a la posibilidad de utilizar, valorar o revisar modelos ya construidos.

Recíprocamente, existen diversos estudios que sugieren una influencia positiva de la comprensión de la naturaleza de los modelos sobre el aprendizaje de las ciencias (Schwarz, 1998, 2002; Gobert et al., 2011). En dichos estudios se aportan datos que muestran que aquellos alumnos que son conscientes de la utilidad de los modelos, de cómo estos se generan o de que no son réplicas exactas de la realidad, pueden comprender mejor qué modelos han de usar en sus razonamientos. De otro, encontramos trabajos como el de Gobert y Discenna (1997) que muestran que los estudiantes que mantienen una comprensión más avanzada acerca de la naturaleza de los modelos, son más capaces también de hacer inferencias con sus modelos una vez construidos. Resultados similares fueron obtenidos más recientemente por Cheng y Lin (2015).

Por otro lado, Smith et al. (2002) encontraron que en la medida en que los estudiantes son conscientes de la utilidad de los modelos y de que estos pueden ser evaluados en función de cómo encajan con la evidencia, son más capaces de emplearlos para explicar evidencias y datos, así como comprender qué modelo es el más apropiado. Más recientemente, Schwarz y White (2005) mostraron que aquellos escenarios didácticos que promueven la indagación basada en modelos acompañada del desarrollo del conocimiento de metamodelización, pueden facilitar el aprendizaje del contenido científico a la vez que se desarrolla también la comprensión sobre la empresa científica. Finalmente, Sins et al. (2009) estudiaron la relación entre la comprensión epistemológica de los alumnos acerca de los modelos manejados en las clases y sus habilidades de procesamiento cognitivo en las tareas desarrolladas. Los resultados mostraron una correlación positiva entre ambas variables.

Es decir, parece que empieza a haber una suficiente confluencia de datos que soportan la hipótesis de que algún tipo de relación existe entre aprender modelos, trabajar con ellos y comprender su naturaleza (Oliva, Aragón y Cuesta, 2015b), si bien, se requiere mucha más investigación empírica destinada a comprobar tal efecto.

Visto de esta manera, los procesos de modelización en el aula se convierten no solo en un objeto y contenido de aprendizaje, sino también en una vía de enseñanza y en una estrategia de aprendizaje, por cuanto aporta un escenario para el desarrollo de propuestas metodologías comprometidas tanto con el aprendizaje de modelos como, en un sentido más amplio, con el desarrollo de la competencia de modelización. Tales estrategias vienen a sumarse a otras ya conocidas desde hace tiempo, como el aprendizaje por descubrimiento, las estrategias de cambio conceptual, o los enfoques de enseñanza-aprendizaje por investigación en torno a problemas, entre otras.

Básicamente, son cuatro, al menos, los posibles rasgos que pueden caracterizar la estrategia de modelización, aunque no necesariamente todos ellos tengan que estar presentes de forma simultánea:

- a) Que el currículum adopte a los modelos como núcleos centrales de referencia, concibiendo el aprendizaje como progresión a lo largo de diferentes modelos.

- b) Que la enseñanza se desarrolle de modo que contribuya al desarrollo de destrezas y valores propios de la competencia de modelización: aplicar modelos para explicar fenómenos; usarlos para realizar predicciones; tomar conciencia sobre el valor aproximativo y limitado de los modelos; establecer límites y ámbitos de validez; gestionar el uso de varios modelos; contribuir a la elaboración de nuevos modelos; etc.
- c) Que instrumentos como las analogías, las maquetas, los modelos a escala, las simulaciones por ordenador, entre otros, formen parte del repertorio de recursos usados en el aula.
- d) Que las tareas que han de abordar los alumnos en el aula, y/o fuera de ella, sigan una secuencia o al menos una intencionalidad- semejante a la de un esquema de modelización como el previsto en la figura 3.

Tales rasgos pueden resultar útiles tanto a la hora de demarcar teóricamente qué propuestas de enseñanza se ubican dentro del ámbito de la modelización, como a la hora de establecer criterios básicos para la elaboración de unidades didácticas planteadas desde esa perspectiva.

## 6. Conclusiones

Como puede verse, los enfoques centrados en la modelización arrancan de presupuestos epistemológicos y de la psicología cognitiva, que tienen repercusiones en el plano didáctico y en la práctica de la educación científica. Básicamente, y resumiendo, desde un punto de vista didáctico tiene las siguientes connotaciones:

- Los modelos son el núcleo central en torno a los que los alumnos construyen conocimientos. El conocimiento se construye en situaciones y contextos concretos.
- En el marco académico (bachillerato y universidad) los contextos a emplear en la tarea de modelización probablemente se aproximen a situaciones y marcos propios del trabajo científico. Para una formación ciudadana (primaria y secundaria obligatoria), los contextos a emplear pueden y deben aproximarse a situaciones cotidianas.
- No es suficiente con que los alumnos aprendan modelos ya hechos. Deben aplicarlos, aprender a revisarlos y cuestionarlos, aportar ideas que contribuyan a generar nuevos modelos y, llegado el caso, aprender a generar nuevos modelos de forma autónoma; todo lo cual viene a configurar lo que se viene llamando competencia de modelización.
- Por tanto, los diseños de enseñanza deben situar a los alumnos ante situaciones en las que desarrollen la competencia de modelización.
- La competencia de modelización constituye una dimensión importante de la competencia científica, no es algo distinto sino parte de ella.
- Las analogías, maquetas, modelos a escala, escenificaciones, simulaciones y los experimentos mentales, constituyen herramientas y recursos didácticos que sitúan a los alumnos en tareas de modelización científica.
- Los enfoques de enseñanza por modelización no son contradictorios con otros planteados dentro del marco constructivista, como el cambio conceptual, la enseñanza por investigación en torno a problemas, la argumentación, el marco CTS (Ciencia-Tecnología-Sociedad), etc. En realidad todos ellos son complementarios, y de hecho gran parte de lo que proponen los otros puede asumirse desde los enfoques centrados en modelos y modelización:
  - a) El cambio conceptual puede entenderse desde aquí como un cambio o evolución en los modelos explicativos de los alumnos.
  - b) La enseñanza por investigación en torno a problemas, impregna netamente la modelización cuando se plantea a partir de un propósito concreto, con una participación activa por parte del alumno y a través de procesos de indagación y comprobación de los modelos generados.

- c) La argumentación, como instrumento crítico para aprender a leer y escribir ciencias, constituye una herramienta esencial a la hora de justificar y criticar los modelos desarrollados por otros o los construidos por uno mismo, por lo que juega también un papel esencial en los procesos de modelización en ciencias.
- d) La enseñanza CTS puede ser de utilidad para proponer contextos en torno a los que trabajar desde enfoques de modelización. En un plano más formal o académico, la historia de la ciencia jugaría un papel central en este sentido, en un marco más próximo a la educación obligatoria, los contextos cotidianos podrían jugar mejor ese papel.

En suma, los enfoques centrados en la modelización parecen jugar hoy un papel importante en la enseñanza de las ciencias, no solo por resultar un marco prometedor para el desarrollo de propuestas didácticas y abrir nuevas perspectivas de investigación, sino por su poder para integrar otras estrategias didácticas y reconceptualizar viejos recursos didácticos conocidos, como por ejemplo las analogías o los modelos a escala, que tan larga tradición tienen en las prácticas de aula.

Finalmente, hay que señalar que la modelización constituye hoy también un campo de investigación joven y efervescente en la didáctica de las ciencias, con numerosos retos y desafíos en forma de preguntas por resolver. En primer lugar, y desde un punto de vista de sus fundamentos, constituye un tema importante a investigar la demarcación de la noción de competencia de modelización, para lo que se precisan estudios tanto de carácter teórico como empíricos destinados a esclarecer la estructura interna y la posible unidad de constructo que la preside, así como su vinculación con la competencia científica. En segundo lugar, desde una perspectiva aplicada, se requieren estudios destinados al diseño y evaluación de propuestas didácticas específicas sobre distintos temas curriculares y para diferentes niveles educativos. Con ello se pretendería, de un lado, incidir en las prácticas de aula y, de otro, comprobar la validez de este tipo de enfoques a través de estudios de caso y/o de investigaciones basadas en diseños. Finalmente, y sin pretender agotar todas las posibilidades, debería realizarse un esfuerzo por integrar estos enfoques con otros ya existentes, como los que se derivan de la enseñanza en contexto, la cual aportaría escenarios de aprendizaje reales, vinculados a entornos CTS y/o con la vida diaria, que den un sentido pleno a la actividad de modelización desde la perspectiva del alumnado. Todas éstas son instancias en torno a las que venimos investigando en la actualidad y sobre las que esperamos ir aportando resultados e interpretaciones que lleven a profundizar en este terreno, así como aportar conclusiones e implicaciones de interés para la práctica docente y para la formación del profesorado de ciencias.

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## EFL LEARNERS' SELF-CONCEPT: REPERCUSSIONS OF NATIVE SPEAKERISM

### "NATIVE SPEAKERISM": REPERCUSIONES EN EL AUTO-CONCEPTO DE ESTUDIANTES DE INGLÉS COMO LENGUA EXTRANJERA

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CHRISTIAN FALLAS ESCOBAR<sup>\*1</sup>

UNIVERSITY OF TEXAS AT SAN ANTONIO\*

#### ABSTRACT

In Costa Rican universities, English as a foreign language (EFL) programs are often filled with practices and discourses that idealize native speakers of English and construct them as the models to follow. In these programs, instructors' overreliance on native speaker proficiency models create unrealistic standards that can misinform EFL learners' views of their proficiency as English speakers. As these students 'fail' to align their present L2 proficiency to the ideal praised in the classroom, they develop negative self-concepts, which lead them to characterize their proficiency as deficient and incomplete. In this paper, I examine tacitly validated practices and circulating narratives in two academic EFL programs in a public Costa Rican university regarding learners' expected EFL proficiency and problematize the repercussions these unspoken expectations may have for these students' overall self-concept as L2 speakers. In light of the results that I discuss herein, I advocate for the abandonment of the native speakerism trend that still prevails in the EFL programs in question and for the construction of EFL teaching practices that provide EFL learners with the validation they deserve for their expanding linguistic repertoire.

**Keywords:** native speakerism; EFL Learners' self concept; self-theory; EFL proficiency.

#### RESUMEN

En las universidades costarricenses, los programas de inglés como lengua extranjera están plagados de prácticas y discursos que idealizan al nativo hablante del inglés y lo posicionan como el modelo a seguir. En estos programas, el uso constante y exclusivo de modelos nativo hablantes por parte de los profesores crean estándares poco reales que pueden distorsionar la percepción que los estudiantes tienen sobre sus capacidades en el idioma inglés. Esto debido a que cuando los estudiantes no logran alinear sus destrezas en la segunda lengua a la proficiencia que implícitamente se idealiza en la clase, estos desarrollan un auto-concepto negativo que los lleva a describir sus propias destrezas lingüísticas como deficientes e incompletas. Es por eso que en este estudio, me doy a la tarea de analizar narrativas circulantes en dos programas académicos de inglés como lengua extrajera de una universidad pública en Costa Rica, en cuanto al nivel de competencia en inglés que los estudiantes perciben se espera de ellos al terminar el programa, y problematizo las repercusiones que estas expectativas implícitas tienen en el auto-concepto de los discentes. A la luz de los resultados que aquí presento, abogo por la erradicación de la tendencia de idealizar al nativo hablante del idioma inglés que aún prevalece en los programas en cuestión y por la construcción de prácticas pedagógicas que validen las destrezas que los estudiantes desarrollan en programas de inglés como lengua extranjera.

**Palabras clave:** preferencia del nativo hablante; el auto-concepto de estudiantes de inglés como lengua extranjera; teoría del auto-concepto; competencias en el aula de inglés como lengua extranjera.

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<sup>1</sup> Email: prongsquib@hotmail.com

## 1. Introduction

Uh... yeah, I can speak English, but what I think is that maybe I'm not perfect... but yeah, I cannot say I'm advanced, an advanced speaker because that is not true. To be advanced, it means that you are like an American, that you can speak like them.... **SZ (Interview #11).**

In Costa Rican universities, EFL programs are often plagued with practices and discourses that idealize native speakers of English and position them as the models to follow. In such programs, teachers' constant reference to and use of native speaker models create unrealistic benchmarks that can distort EFL learners' views of their abilities as English speakers. As these students 'fail' to align their L2 proficiency to the ideal praised in the classroom, they develop problematic L2 self-concepts that lead them to characterize their own proficiency as deficient and incomplete. Sadly, it is not uncommon to hear EFL learners voice their lack of confidence in their competence as L2 speakers. It is against this backdrop that I sustain we must take a more critical position towards the native speakerism implicit in the practices and narratives aforementioned, so that EFL students' sense of deficit and incompleteness can be eradicated.

In this paper, I examine the endorsed practices and circulating narratives in two academic EFL programs in a public university in Costa Rica, regarding learners' ideal EFL proficiency. Subsequently, I problematize the repercussions these unspoken expectations may have for these students' overall self-concept as L2 speakers. With this end in mind, I conducted open-ended interviews with 22 senior students, which I analyzed qualitatively and quantitatively. In light of the results that I discuss herein, I advocate for the abandonment of the native speakerism trend that still prevails in the EFL programs in question and for the construction of EFL teaching practices that provide EFL learners with the validation and encouragement they deserve for their expanding linguistic repertoire.

## 2. Theoretical framework

My position in this paper is that the uncritical reference to and overreliance on native speaker proficiency models in EFL classrooms exposes students to unrealistic and impossible standards (ideal and 'ought to' selves) that severely distort EFL learners' perceptions of their actual L2 proficiency (actual selves). This overexposure to native speaker models, I sustain, causes EFL learners to develop problematic L2 self-concepts, which lead them to characterize their own proficiency as incomplete and deficient. Hence, in this section, I address the importance of nurturing positive self-concepts in EFL classrooms and the corollaries of the uncritical reference to and exclusive use of native speakers as the proficiency models in EFL settings.

### 2.1. EFL learners' self-concept: Ideal, 'ought to' and actual selves

I coincide with Arnaiz and Guillen that "... no other area of study presents as much of a threat to self-concept as does foreign language learning" (2012: 81), reason why attention should be paid to whether or not EFL programs are directly or indirectly contributing to EFL learners' positive concepts regarding their language proficiency and overall success as EFL users. Notwithstanding, as these authors claim, despite the existing evidence that enhancing students' self-concept leads to positive educational gains such as better academic achievement and higher levels of perseverance, few studies exist that examine the construct in the realm of EFL (81), especially in light of Self-theory (Higgins 1987; Dornyei 2001) and Self-discrepancy Theory (Higgins 1987).

Initially considered to be consistent across domains, current literature acknowledges that, "Self-concept consists of a person's self-perceptions built through experience with—and interpretations of—one's environment" (Arnaiz & Guillen 2012: 81). According to these authors, given the 'ego-involving' nature of EFL learning, students' self-concept is particularly vulnerable to severe damage that can turn the EFL learning experience into an ordeal (82). Further, they point, commenting on

Stevick (1980), that success in EFL depends more on what happens inside and between people in the classroom than on materials and techniques, so much so that even the most appealing materials/innovative techniques render themselves unsuccessful should negative emotional factors exist in the EFL setting (82).

Similarly, Genç, Kalusakli and Aydin have shed light on the importance of self-concept. As these scholars claim, self-concept "... is the personal determination of one's own ability to deal with a certain task. Notably, this determination is not based entirely on actual past experience or existing ability and skills but also on students' perceptions of their own knowledge and ability relative to the task or situation..." (2016: 54). Put differently, as much as past experiences and existing ability influence EFL learners' self-concept, their own perceptions as L2 speakers are so powerful that a negative self-concept can lead to demotivation, especially in the face of impossible and realistic standards.

Following Self-Theory (Dornyei 2001), self-concept is sustained by three possible selves (Higgins 1987): (1) the ideal self –one's representation of the attributes that oneself or someone else would like oneself to possess–, (2) the 'ought to' self –one's representation of the attributes oneself or someone else thinks oneself should have–, and the actual self –ones' representation of the attributes oneself or someone else believes oneself actually possesses. Now, according to Higgins' Self-discrepancy Theory (1987), individuals work to align their actual selves to their ideal or 'ought to' selves, which can result in two opposite scenarios: learners' whose efforts render positive results feel highly motivated whereas learners' whose efforts are unsuccessful (when their ideal/'ought to' selves are impossible to attain) experience dissatisfaction and demotivation, which can negatively affect their self-concepts.

Given the importance of EFL learners' L2 self-concept, I now turn to discuss the repercussions that the uncritical use of and reference to native speaker as proficiency models may have for learners' perceptions of their own proficiency. In the process, I list some of the criticism that the notions of native and non-native speakers have received on the basis of the privilege, power, and marginalization issues hidden underneath the terms. Additionally, I explain how these can cause learners to develop feelings of incompleteness, inadequacy and deficiency, despite their proficiency, and elucidate how these two terms perpetuate inequitable relations by positioning native speakers as the norm and characterizing EFL learners' proficiency as deviant.

## *2.2. Native speakerism and its repercussions on EFL learners' self-concept*

In EFL classrooms, native English speaker proficiency models –in the form of videos and audios- tend to be favored without critical consideration of its repercussions: overexposure to native speaker proficiency models can construct unrealistic and impossible standards for L2 learners that lead them to believe that, no matter how proficient they become, they will always be second-class speakers of English. Sadly, despite the criticism that the notions of native and non-native speakers have received, the practice of idealizing native speaker competence continues to prevail in EFL classrooms.

An important critique that the terms native and non-native speakers have been the target of is that these have served to divide speakers of English into the 'haves' and the 'have-nots', thus perpetuating marginalization on the latter (Higgins 2004). This marginalization is evident in the model proposed by Kachru (1992), who employed three concentric circles to represent the spread of English in the world. In the inner circle, Kachru placed countries where English 'originated' (e.g. USA, Canada, Australia and England) and labeled them norm providing. In the outer circle, he consigned countries where English has been relocated by way of colonization (e.g. India, Singapore and Nigeria) and classified them as norm developing, given that their varieties of English 'deviate' from the norm dictated by the inner circle countries. Finally, in the expanding circle, Kachru placed the countries where English has no official status but is used as a second/foreign language, which he designated as norm dependent (e.g. Latin America).

Another criticism of this dichotomous view, pitting inner circle speakers against outer and expanding circle speakers, is that, "The notion of 'native speaker' has been employed as a mark of power and prestige for the benefit of some individuals, while 'nonnative' has also been used as an instrument to exclude others on the base of race and culture" (Schmitz 2009: 3). In this regard, Schmitz also claims that, in the studies conducted by second language acquisition (SLA) specialists, regarding why outer and expanding circle members fail to acquire the competence of members of the inner circle, the problem lies in the fact that inner circles members have always been perceived as speakers whereas outer/expanding circles members have been seen as perpetual learners.

As a matter of fact, SLA describes the varieties of English spoken in the outer/expanding circles as fossilized interlanguage forms that deviate from the standards emanating from inner circle countries, which undoubtedly plays a part in the marginalization of both outer/expanding circle members. This fossilization approach to L2 learning operates upon the assumption that language use which differs from that of native speakers is taken as evidence that EFL learners, specifically, failed to become native speakers and their proficiency is in a permanent unfinished state, never reaching a final form (Cook 1999: 195-196).

Yet other scholars have pointed to the unsuitability of looking at EFL learning through the lens of the terms in question. On the one hand, native speakers are taken to be those who had exposure to the language from birth and had a monolingual upbringing. On the other hand, nonnative speakers acquired language competence in English later in life and, thus, are constructed "... as possessing (or striving to possess) a derivative and approximate kind of linguistic competence, one that betrays itself in detectable traces of other languages during [...] language use" (May 2014: 35). Under this definition, learners are marginalized as, "It is by virtue of from-birth exposure to, and primary socialization into only one language that the archetypal native speaker is imagined to possess a superior kind of linguistic competence, one whose purity proves itself in the absence of detectable traces of any other languages during [...] language use" (May 2014: 35).

The monolingual upbringing ideal unspoken in the native/nonnative speaker labels creates a dogma of language rights that takes ownership by birth as the most rightful link between a language and its speakers and assumes that a monolingual upbringing affords speakers a superior form of language proficiency. This ideology assumes that L2 learners inhabit an imaginary space where what is acquired by virtue of birth can never be matched by what is learned in classroom contexts. In hindsight, positioning native speaker competence as benchmark and taking L2/L1 learning to be the same is problematic for research because, "[...] the bi/multilingual participants that inhabit SLA studies, once reconstrued into aspiring monolinguals of the new language, must be characterized by deficit by being less than a full language user [...]" (May 2014: 36-46).

Mouse and Llurda (2008) also brought forth three main arguments against the native and non-native speaker dualism: (1) that classifying EFL users as nonnative speakers based on their proficiency in the L2 is Anglo-centric since it erases the fact that these individuals are native speakers of their L1 and positions English as the only language that deserves attention, (2) that the native and nonnative notion treats indigenized varieties of English spoken in India and Africa as nonnative based on the fact that these do not abide by the norms of the hegemonic varieties spoken in the USA and England (Kachru 1992), and (3) that the notion disregards the interdependence between EFL teaching/learning and its context, where English is utilized for purposes entirely different from those in settings where English is used as the main and official language.

All in all, taking native speaker proficiency models as the arbiter of learning does a great disservice to EFL learners: it leads them to feel apologetic that their performance does not match the native speaker standard. EFL classrooms, where the terms native and nonnative speaker are used uncritically and native speaker models are favored over proficient non-native speaker ones, are bound to become spaces where EFL learners buy into unrealistic and impossible ideal and

'ought to' selves. Sadly, as EFL learners realize that their actual selves do not align with the ideal and 'ought to' selves praised in the EFL classroom (no matter how proficient they become), they are led to develop an unfavorable L2 self-concept regarding their language proficiency.

The landscape described above can have a serious repercussion: EFL learners develop a tendency to characterize their own English as deficient, unfinished, unpolished, and inadequate. It is for this reason that I sustain in this paper that we should abandon the native speakerism tendency still circulating in EFL classrooms and replace it for alternative practices that allow students to see their L2 proficiency in a more positive light. The criticisms listed in this section point to a much-needed de-colonization of EFL classrooms from marginalizing narratives of native speaker competence ideals.

### **3. Methodology**

The data analyzed in this paper was drawn from open-ended interviews conducted with 11 senior students completing a B.A. in English as a Foreign Language and another 11 senior students finishing a B.A. in English teaching. These students were in the last semester of their four-year academic program, which formed them in areas such as general English (listening and speaking, reading and writing, coupled with specific courses on grammar and pronunciation), culture, literature, and linguistics (general linguistics, morphology, syntax, phonetics, phonology, and diachronics). The four hours of data (22 interviews) provided insights into the students' perceptions of their current proficiency (actual self) and ideal/expected proficiency in the program (ideal, and 'ought to' selves).

Fourth-year students were selected because they have been exposed the longest to the discourses and practices that idealize native speakers and belittle the linguistic achievements of nonnative speakers/emergent bilinguals. Thus, the repercussions of native speakerism on EFL learners' self-concept can be found in them to a greater extent. The questions that comprised the interviews were grouped into three major themes: (1) How do you feel about your English proficiency in general? What rating (from 1 to 10) would you give to your English language proficiency? Why? What will it take you to achieve the proficiency that merits a 10? (2) Would you consider yourself to be bilingual? Why? How would you describe the language proficiency of a bilingual speaker? How is your proficiency similar or different from that of a bilingual speaker? (3) How often do we, professors, incorporate into our lessons videos/audios featuring native or nonnative speakers of English? What do you think about that practice? What could be some consequences of that practice?

The data coming from the interviews were analyzed qualitatively as well as quantitatively using percentages. The emerging patterns were classified into major narratives of actual, ideal and 'ought to' selves, as the repercussions of the native speakerism that still prevails in the EFL programs under scrutiny were traced. These narratives are described in the subsequent section.

### **4. Analysis of findings**

In this section, I present the themes that emerged from the quantitative and qualitative analysis of the data. Overall, the data confirmed that there is a circulating unspoken narrative that instills in the learners' ideal and 'ought to' selves expectations based on native speaker competence and that this narrative has an impact on the students' overall L2 self-concept regarding their EFL proficiency. The findings are divided in three major sections: (1) students' perceptions of their actual/ideal selves and exposure to NS models, (2) circulating narratives/discourses regarding EFL Learning and EFL proficiency, and (3) students' resistance to narratives of NS competence as Ideal.

#### *4.1. Students' perceptions of their actual/ideal selves and exposure to native speaker models*

Overall, diverse perceptions were found regarding students' actual self (current proficiency) and ideal self (aspired proficiency). As noted in Figure 1 below, a high number of the students (8) rated their current English proficiency with an eight, which can be assumed to be a good rating. Likewise, however, six students also considered their proficiency to deserve a seven, a low rating considering they have had four years of formation in their corresponding majors (B.A. in English Teaching and B.A. in EFL). Furthermore, five students vacillated between a seven and an eight. If these students are put together, the number becomes more revealing: half population (11) still hesitates to give their proficiency a good rating. Alarmingly, however, the lowest number of students (3) falls in the group that rates their proficiency with an eight or nine, which reflects a more favorable view of their current English proficiency.

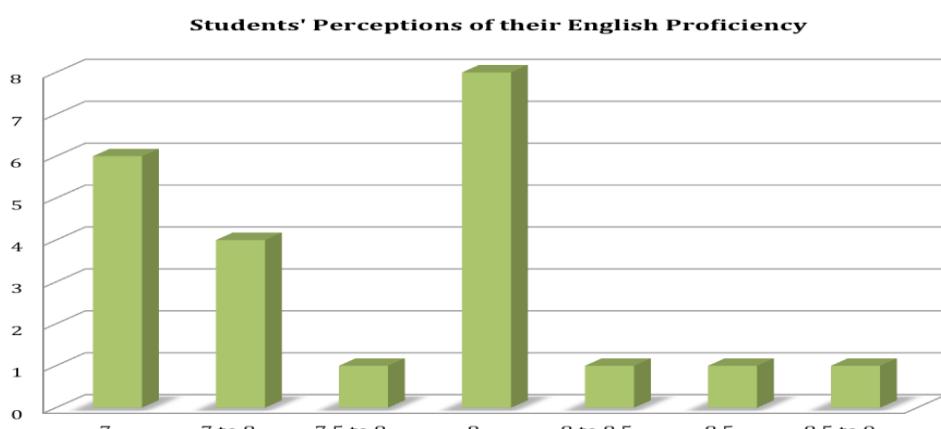


Figure 1. *Students' perceptions of their English proficiency*

Why did the minority of the students rate their English proficiency more favorably? Why did the other students hesitate/refuse to rate their proficiency with a nine or a ten? Which benchmark are they evaluating their proficiency against? And what does this imply about their ideal self (aspired language proficiency)? The students' ratings of their current proficiency are further illuminated by what they stated they must do to advance their English proficiency closer to a ten.

As shown in figure 2 below, the vast majority of the participating learners agree that further exposure to native speaker models (ideal self/proficiency)—either in their home country, in an English-speaking country, or by way of videos or music—would aid them in attaining the proficiency that merits a rating of ten (columns 1, 2 and 5). Interestingly, two students confessed that losing the fear or insecurity, triggered by not sounding native-like, would allow them to perform better in the target language and thus earn them the rating of ten. Likewise, one student, who stated that speaking only with fellow nonnative speaking classmates deprives him from opportunities to further proficiency, affirmed that speaking with other EFL speakers outside the class would also help. On the other hand, some students mentioned working on their proficiency on their own and more general speaking practice as ways to get closer to that rating of 10. Table 1 illustrates the prominent trend in their answers ("I" means interviewer and other acronyms stand for the students' names).

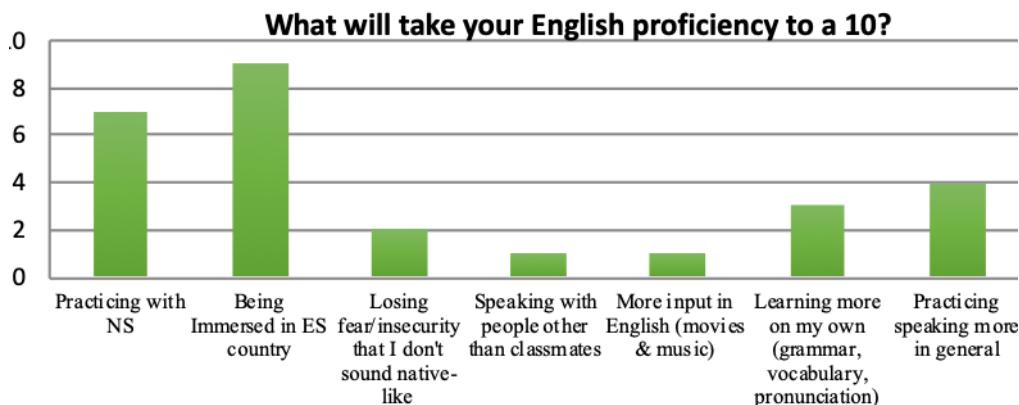


Figure 2. Students' perceptions of what is needed to deserve a rating of 10

Table 1.

Students' perceptions of what they should do to bring their proficiency to a rating of 10

<b>I:</b> And what do you think is gonna take you to that 10?
<b>AEA:</b> Effort and... I think that, well it's like my personal opinion, but I think that to be a 10, you should be immersed in an English speaking country, because here, you practice English with your professors and your classmates...
<b>I:</b> What do you think is gonna take you to that 10?
<b>RD:</b> To go to the United States or any English speaking country and spend time there.
<b>I:</b> Is this something you've done already?
<b>RD:</b> No. But I think it's important to do it because you need, you really need to be immersed in the language and live it and the culture and in the context that maybe that's going to make me improve.
<b>I:</b> In the future, how do you know that you've come to that 10?
<b>CS:</b> When I can keep any kind of conversation with an American... because here in class, it's just very deficient because nobody, I mean, the classmates not professors, because you know, they are not... native speakers....
<b>I:</b> And what do you think is gonna take to that 100%? Cuz you're 90% sure...
<b>JG:</b> Interaction in the native culture, I mean being immersed with native speakers, not with classmates, but also interaction, not only with them, I mean, it's not the same if they come to Costa Rica, but if I go there and interact with them in their culture, in their country, surrounded only by people who speak English....

The frequency with which professors exposed these students to videos or audios featuring native or nonnative speakers helps shed light on the driving force behind the students' unfavorable rating of their English and their opinions that more exposure to native speaker proficiency models will push them closer to a rating of ten. As shown in Figure 3 below, in both programs, there is a clear trend to prefer videos/audios featuring native speakers rather than nonnative speakers. As a matter of fact, as some students explained, oftentimes when videos of nonnative speakers were used in class, it was the students who brought them. On the rare occasions that professors brought them, it was in linguistics courses for the purpose of studying second language acquisition processes in adults and analyzing the mistakes they make. Thus, one might infer that the barrage of native speakers models that the students have been exposed to has led them to buy into a narrative that native-like proficiency is the ideal. Concomitantly, their noticing that their proficiency does not align with this tacit ideal and unspoken expectation drives them to hesitate to rate their mastery of English more favorably. This conclusion is further supported and elaborated in the subsequent section of this paper.

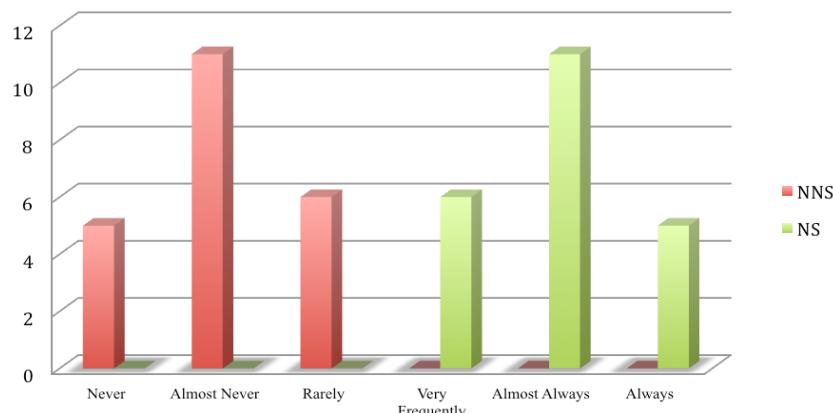
**Frequency of Use of Videos/Audios Featuring NS or NNS**

Figure 3. Frequency of use of videos and audios featuring NS and NNS models

#### 4.2. Circulating narratives/discourses regarding EFL learning and proficiency

The interviews conducted with the participating students provided insights into the specifics of the narratives, regarding EFL learners' proficiency, that currently circulate in the B.A. programs under scrutiny. These narratives/discourses were lumped into the following categories: (1) indicators of proficiency, (2) role of native speaker models in EFL teaching and learning, (3) and perceptions of nonnative speakers' proficiency.

Regarding the first category, the students reported that being able to successfully communicate with native speakers (and by this they meant mostly USA citizens) is the ultimate proof that they have acquired an advanced proficiency level. Similarly, they sustained that knowledge of the culture of English speaking countries is compulsory to gain membership into an imagined community (Anderson, 1991) of proficient EFL speakers. Interestingly, they also claimed that having the capacity to code-switch from L1 to L2 naturally and fluently is indicative of advanced proficiency. At a more structural and semantic level, they reported that grammaticality, fluency and naturalness in the use of English, which is to be peppered with idioms and phrasal verbs, indicate mastery of the target language. Finally, they stated the sounding native-like and being able to 'think' in English are two crucial factors in determining proficiency level.

Table 2.

Students' perceptions of indicators of high English proficiency

<b>I:</b> In the future, how do you know that you've come to that 10?
<b>CS:</b> When I can keep any kind of conversation with an American... because here in class, it's just very deficient because nobody, I mean, the classmates not professors, because you know, they are not... native... speakers....
<b>KG:</b> [excellent proficiency] is not only a matter of language but also a matter of culture, and I think that I need to learn more about the culture in order to learn the way the language works....
<b>I:</b> And what is your evaluation of that practice of favoring native speaker models?
<b>GP:</b> It is good because we realize that even though we have a lot of time studying English here, reading in English, being bombarded with everything in English, speaking in English, reading in English, and listening English, even though we have that background in the language, when we get to the point to listen to a movie completely in English, we realize that maybe we are not that good at listening, or we are not understanding like native speakers in the way we believe, so I think, I personally believe that it is necessary to have more contact with native speakers...
<b>SZ:</b> I cannot say I'm an advanced speaker; to be advanced means that you are like an American, that you can speak like them...
<b>I:</b> And what do you think is gonna take to that 100%? Cuz you're 90% sure...
<b>JG:</b> Interaction in the native culture, I mean being immersed with native speakers, not with classmates, but also interaction, not only with them, I mean, it's not the same if they come to Costa Rica, but if I go

there and interact with them in their culture, in their country, surrounded only by people who speak English, then it would be something, but of course, there are many other things I could do in here that would help me, but I think that the most effective one is that one...

As to the role of native speaker models in the EFL classroom, several interesting perceptions arose (see table 3 below). First and foremost, they reported that exposure to native speakers pushes them to further their proficiency and that they are a source of 'real practice'. Similarly, they claimed that input that exposes them to native speaker models is crucial since it shows language 'as it should be', granting native speakers the status of 'best models'. Likewise, they sustained that native speaker proficiency models play an important role as they serve as a roadmap to where they need to get. One student even went on to affirm that she finds the practice of exposing students to native speaker models abundantly to be good and that she will replicate the practice as a future EFL educator. Finally, another student said that she feels that the expectation in the program is for students to get as close as possible to native-like proficiency.

Table 3.

Students' perceptions about the role of native speaker models in EFL teaching and learning

<b>NAL:</b> I believe that [listening to NES important because it's to get closer to native, it's more like to practice, it's not the same when I'm talking to another student....]
<b>JG:</b> [Being exposed to NES models]... makes us, uhhhhh, it punish... uhhh, no, punish no, it pushes us to go further because [...] because it's not the same to listen to professors in here, and then go to the states, or when native speakers come here, we don't have the same interaction.... because of the accent and everything is different....
<b>I:</b> What do you think is gonna take you from that 7 or 8 to a 10? <b>EA:</b> Maybe practicing with a native speaker... That would help a lot because I would get used to the way they speak.
<b>I:</b> And what do you think of this tendency for us to show you videos almost only [featuring] NES? <b>EA:</b> I think it is very useful and especially if it is about a native speaker because they use the language as it should be.
<b>FF:</b> ... Native speakers of English, they, I mean, the way they use the language is natural, spontaneous, they don't care about, they don't care as we do about making grammar mistakes, pronunciation mistakes, so when you listen to native speakers...you feel like immersed a little bit in like their culture, in the way they use the language.
<b>I:</b> And what is this evaluation of this preference for videos or audios featuring NES? <b>HB:</b> I think it's the best to hear like native speakers because, as I said before, they speak differently.... we're like very wordy and they help us to, uhhh, to reduce that usage of a lot of words, and I think that helps me a lot.
<b>I:</b> In the future, how do you know that you've come to that 10? <b>CS:</b> When I can keep any kind of conversation with an American... because here in class, it's just very deficient because nobody, I mean, the classmates not professors, because you know, they are not... native... speakers....

On the other hand, as regards the status of nonnative speakers, they also reported revealing perceptions that point to the native speakerism trend in the department. Rather blatantly, one student sustained that including nonnative speaker models is counterintuitive because students cannot improve their proficiency by listening to mistakes. Relatedly, another student casted doubt on the usefulness of nonnative speaker models by saying that they do not speak in 'the best way', probably referring to the overall stigma of deficiency that nonnative speakers bear. Another student echoed the previous ideas by stating that being exposed to nonnative speaker proficiency models hinders the students' opportunities to further their English proficiency. All these perceptions may be triggered by what they reported to be the trend in the programs: to use videos/audios featuring nonnative speakers for the purposes of discussing SLA in adults and analyzing their mistakes.

Table 4.

## Students' perceptions of nonnative speakers' proficiency

I: And what is your evaluation of the practice of favoring videos featuring native speakers?
<b>CC:</b> I think it is how it is supposed to be because you cannot train your ear by listening to people making mistakes, which is something we do here; that's why people are constantly making mistakes, sometimes people don't learn at all...
I: And what do you think about this practice or this 'reality'?
<b>JG:</b> Maybe we think that's the best way language can be expressed, maybe we think that nonnative speakers don't do it the best way.
I: And what is your evaluation of this practice of favoring NES over NNES in our classes, in the videos and audios we bring?
<b>FF:</b> Ok, I like the idea and I think I'll do the same, like, to bring more videos about native speakers... I don't know if I'm right, but I think it's better...
<b>NAL:</b> I believe that it's important because it's to get closer to native [...] it's not the same when I'm talking to another student....

All in all, the students' perceptions that successful communication with native speakers is the ultimate proof of EFL proficiency, that native speakers are the best examples to follow, and that exposure to nonnative speakers may hinder the advancement of their proficiency, I suspect, are rooted in the trend described above of favoring native speaker models and describing nonnative speakers in terms of deficiencies. And yet, some of the students seemed to find fault in this overreliance on native speaker models. These counter narratives are presented the next section.

#### 4.3. Students' resistance to narratives of native speaker competence as ideal

Although the majority of the students agreed with the native speakerism trend in operation in the programs, they also showed partial disagreement and seemed to find fault in it. These counter narratives represent the students' over/covert resistance against the native-like ideal circulating in the classroom. As with the previous section, the emerging categories were grouped into themes: (1) the diversity of interlocutors, (2) nonnative speakers' capacity to be highly proficient, (3) the unsoundness of expecting students to sound native-like, (4) exposure to nonnative speakers creates a sense of community, (5) and the repercussions of unrealistic proficiency benchmarks.

Some students appeared to be aware that an overreliance on videos and audios featuring native speakers only can be problematic. As one student acknowledged, the programs are in need for a balance of videos/audios featuring both native and nonnative speakers because they will engage in communication with a large diversity of interlocutors. Another student showed preoccupation about this unrealistic expectation or one-sided goal for communication to happen between them and native speakers of English only. Likewise, other students are concerned that exposure to native speaker models only may deprive them from becoming able to understand international English. Finally, resisting against the native speaker ideal, one student noted that exposure to videos and audios featuring nonnative speaker models has the potential to demonstrate how diverse nonnative speakers can be in their accents and levels of proficiency.

Table 5.

## Students' awareness of diversity of interlocutors

I: And in your opinion, what would be an effective practice? To have students watch videos featuring only NES or both?
<b>JL:</b> I would say like a combination because many people I know like to work in a call centers and sometimes there are people who call from other places and they don't get what they were saying because they weren't exposed to that type of pronunciation.
I: And what is your evaluation of that practice of including in the videos only native speakers of English?

<b>KV:</b> I think that's not real life because they are not only native speakers but also professionals, but when it comes to real life, when you're speaking with people from the states, you'll see that there are different accents and different ways of speaking, and if we see English just from one perspective, then when we hear a Chinese speaking English, we don't understand that person.
<b>I:</b> Would you see any value in professors incorporating more often videos featuring bilingual speakers?
<b>WZ:</b> Yes, because they show us how diverse we can be, because if not, we will, of course we listen to these TV shows with their perfect English, and that is what we have as a reference...
<b>I:</b> Would you recommend incorporating videos of people from China, India, the Netherlands, [etc.] speaking English?
<b>AEA:</b> Yeah, since the first year teachers should do that... As I mentioned, I worked at a call center, I worked with an Indian person and I couldn't understand anything.... [...] and I think that if you start listening or watching those videos since the first year, you are going to get used to their accent and you are going to understand when they speak.
<b>JRB:</b> I think that there should be a balance and I think that it doesn't work much if you watch a video in which there is an English native speaker, if you're only going to use your English with bilinguals...

On the topic of linguistic attainment, students also claimed that nonnative speakers can achieve a high/advanced proficiency level. As one student asserted, despite her awareness that she still needs to improve, experience has shown her that she is a proficient bilingual speaker able to communicate with both native and nonnative speakers. This same student reported that nonnative speakers can also be proficient and that she does not need to sound native like to be able to use the language. Similarly, another student sustained that having a foreign accent is not bad. Yet, another student defended that she has her own accent and that she finds people's expectation for her to sound native like to be unreasonable. Finally, there also seems to be a concern around the unfairness of judging the proficiency of a nonnative speaker against a native speaker model.

Table 6.

Students' awareness of nonnative speakers' capacity to be highly proficient

<b>I:</b> Do you agree with this practice of favoring videos featuring only native speakers of English?
<b>MA:</b> I don't think so... because there are people who are not native speakers who are very good at speaking English... and I think that sounding or, yeah, like, speaking like a native is not a way to say that you know English. You don't need to be a native to be able to speak the language....
<b>I:</b> And what do you think could be potential consequences of showing a group of students videos showing only NS?
<b>MA:</b> One consequence could be that they have to be or sound like that person that is in the video...
<b>I:</b> So what is your evaluation of the practice of favoring videos that feature native speakers only?
<b>JG:</b> I think I like it, it's good that we use native speakers as a reference for us to learn the language, but it wouldn't be bad if we included nonnative speakers that also can do it well, that can also teach us something, because that's also the way we speak, we don't speak like native speakers, we never do it, it would be real difficult too...
<b>I:</b> Try to remember your journey, your trajectory here from beginning to end, and tell me how often teachers here showed you videos or audios featuring native and nonnative speakers...
<b>HB:</b> Well, I remember in linguistics, prof. V, she likes videos, and since she was teaching linguistics, she showed videos of native and nonnative speakers, so that was very nice because you can see that they have their own accent and that's not bad...
<b>I:</b> What do you think is the expectation in that person's head?
<b>WZ:</b> [silence] Like they expect that I talk like a native... they, they, they are waiting for me to talk, or they're expecting that I talk like those people they watch on television or TV shows [...] and they start telling me "Oh, can you talk like a British, for example, can you talk, can you make the accent they do....? How come? I mean, I have my own accent..."
<b>JG:</b> Nonnative speakers also can speak well... maybe teachers can also bring videos or audios of nonnative speakers that they also speak the language very, very, that they also do it well....

Although not all, some students found the native-like competence ideal to be unrealistic. As they reported, this overreliance on native speaker models gives students false expectations and creates unrealistic benchmarks against which students learn to assess their current English proficiency. A reflection also arose as to the fact that professors were taught to rely on native speaker models as a point of reference and that the students themselves are being taught to do the same, the implication being that the uncritical use of native speaker models continues to be perpetuated. In this regard, one student reported that her dream, at some point, was to sound native-like and that she has recently freed herself from that difficult pursuit.

Table 7.

## The unsoundness of expecting students to sound native-like

<b>I:</b> And just to close the interview, what do you think could be the consequences of exposing students to only NES?
<b>JRB:</b> I think you would be showing a fake reality, you won't be focusing on, you'll be targeting your students to one simple goal that might not be achieved here because it's not that possible... So I think you might be giving false expectations to students....
<b>KV:</b> We cannot say that the person is not bilingual because that person is not speaking properly....
<b>I:</b> And what do you think people mean by 'properly'?
<b>KV:</b> Properly, perfectly, but it's the same, it goes to the same point, always comparing people with native speakers....

Additionally, students also mentioned several reasons in favor of the inclusion of nonnative speaker models in EFL teaching and learning. As one student stated, exposure to native speaker models is good, but there is also a need to include nonnative speaker models as they create a sense of community and camaraderie among speakers of international English. That is, exposure to speakers, who just like them, have had to or have chosen to learn EFL, demonstrates that there is a community of proficient nonnative speakers who succeed at international communication regardless of the foreign-ness in their accents. Other students referred to how exposure to nonnative speaker models can bolster motivation as these depict a more reasonable and realistic benchmark. Further, other students stated that videos or audios of nonnative speakers create a sense that language use that is not native-like but still proficient is valuable and worth of admiration.

Table 8.

## Exposure to nonnative speaker models creates a sense of community

<b>NAL:</b> .... I'm talking about an idea that is behind that, that if I hear only native speakers and if I hear how they speak, I want to speak in that way, but then when I speak, I don't speak in that way and I feel bad because of that, but I know that that is not the intention of it..... but if I see people who also speak well, and they have this, uhhh, not mispronunciation, but they have this trace of their mother tongue, so you say, it's not bad if I say this in this way, or maybe I can feel more relaxed when I'm talking to another person because I accept that in myself.
<b>FF:</b> .... I don't know if I'm right, but I think it's better, but it is also important maybe to listen to people who are nonnative because you can see, and maybe you can feel identified and say "Oh, that person is saying that and that is wrong!", so, because, natives are not going to make mistakes, but the people who are nonnative, they can make mistakes and you can feel identified, and you can see how much you know by seeing what other people do....
<b>EA:</b> [It would be] great to have a native speaker to practice, but if you also have a bilingual speaker to practice with, you, like, get... it is, you are more like in contact with that person because you both, both of you have gone through the same process and it if it's in a video, you feel more identified with the person, and if the person has a good proficiency in English, so you say like "If I practice I can be like that person", so you get motivated....
<b>NAL:</b> I believe that [using NNS models] would be better, you would feel more comfortable with your way of talking because you have examples of people that also have English as their L2, so in that way, you don't feel that bad when you make a mistake or when you pronounce something in this particular way, you say ok, you feel more relieved.

Finally, regarding the repercussions of having unrealistic EFL proficiency benchmarks in the classroom, some of the students provided important opinions. One student expressed that the expectation to attain native-like competence is overwhelming. Other students state that they are aware of such expectation and confess that they try hard to achieve native-like competence and that the realization that they cannot sound native-like makes them feel bad, nervous, insecure and deficient. This native-like competence ideal is so deep-rooted, one student confesses, that even classmates mock each other on the basis of pronunciation that does not resemble that of native speakers. This situation, she reported, has hindered her confidence in her proficiency and deflected her participation.

Table 9.

## Repercussions of unrealistic proficiency benchmarks

<b>I:</b> And what do you think could be potential consequences of showing a group of students videos showing only NES?
<b>MA:</b> One consequence could be that they have to be or sound like that person that is in the video...
<b>I:</b> And what do you think about this tendency for us professors to favor videos and audios featuring NES?
<b>AEA:</b> Well, I would say, somehow that's how you and we are taught to do, because, well, when I teach, I use those kinds of videos with only native speakers... and I think it's very important to use Spanish speakers speaking in English because that's what we are listening here, so it's important because you can analyze the pronunciation and ways of speaking.
<b>I:</b> And what do you think is one of the consequences of that practice on students?
<b>WZ:</b> Students like me! [laughs]. Like professors teach you all the theory, all the dialects that there can be, all the variations that we can have, but they don't teach you how the real world is, okay, you can have this, this, this and this... you know it because you have looked for it, but not really in the context of the class, really exemplified....
<b>RD:</b> I don't know, sometimes I feel like very well, some days after a presentation I say I'm the best but some other days I say my pronunciation is awful. I don't know, it's... maybe regarding... maybe when I compare myself to native pronunciation I know that's almost impossible, but I always want to get as close as it can be, so... sometimes when I talk to native people I feel like... (laughs) I'm not even close to that! So I feel very bad...
<b>I:</b> But what triggers [that fear of speaking]?
<b>VS:</b> My classmates [laughs]... It's not even the professor.... it's my classmates because they are so picky, and they criticize my pronunciation when I'm giving like oral presentations in front of the class... I'm from Coto, and [there] I was so happy, I used to talk a lot and here I'm just so quiet, and that is actually affecting me and I can see it, I can feel it... and it's my classmates...
<b>I:</b> And what's gonna take you to that 10?
<b>AEA:</b> I think more conversations, I think you need to talk more.... Well, last semester we were assigned to have certain conversations with native speakers and I realized that it was really hard for me because I get so nervous and I'm so afraid to make mistakes that I.... I was making a lot of mistakes, indeed.... pronunciation mistakes, and grammatical mistakes, and I knew they were mistakes, but it was unconscious, let's say...

In sum, these opinions comprise students' resistance to institutionalized and normalized narratives and practices of native speakerism. Despite overall acceptance of the status quo, students carry with them counter narratives that are based on the idea that nonnative speakers' proficiency needs to be understood through a lens of diversity and community building so that reasonable, realistic, fair, and sound expectations are created within the program. These

expectations, the general sentiment seems to be, should acknowledge the linguistic attainment of students in the programs regardless of whether or not their proficiency is native-like.

## 5. Conclusions and recommendations

*I: So, if you're saying that you are fully bi...(corrects himself) bilingual at this point, um, why did you give yourself a seven?*

*RD: (laughs) I don't know... I don't know when can you get a 10. Maybe you cannot because you cannot actually talk as a native speaker. So, maybe you can never... (RD interview # 22)*

Instructors might think that there is no harm in favoring native speaker models in the form of videos and audios in the EFL classroom. However, implicit in this practice there is an unspoken narrative of native speaker competence as ideal L2 self that students learn to aspire to and eventually use to evaluate their present EFL proficiency, as noted in the interview segment above. In all interviews, regardless of the rating the students assigned to their L2 proficiency, the number always came accompanied by the phrase "...but I still need to improve a lot." And maybe their desire to further their skills is valid, reasonable and even commendable. And yet, the question remains: if they acknowledge they can communicate with both native and nonnative speakers, what image(s) do they hold in their minds when they think of future improvements?

Interestingly, and unfortunately as well, I also found that the students not only have doubts regarding the incorporation of nonnative speaker models in the form of audios and videos but also seem to question the value of interacting with their fellow nonnative speaker classmates and even getting used to the way their nonnative speaker teachers use language. As student overtly stated, "... here in class, it's just very deficient because nobody, I mean, the classmates not professors, because you know, they are not... native... speakers..." (CS, interview #9). Although this was the most blatant response among all responses, other students more covertly suggested that limiting their interactions and practice opportunities to their nonnative speaker classmates and teachers can potentially hinder their attempts to advance L2 proficiency. This unspoken narrative of native speakerism that positions native speakers as the best examples of language use and constructs nonnative speakers as norm-dependent at best, I sustain, necessitates efforts on the part of both teachers and students to clear the EFL classroom from feelings of incompleteness, deficiency, inadequacy, and in turn, rid the latter from the tendency to cast doubt on their L2 proficiency.

All in all, the participating students' hesitation to assess their EFL proficiency (actual self) more favorably and their tendency to think that further exposure to native speaker models will earn them a rating of ten may be linked to that fact that, throughout their academic programs, they have been exposed exclusively to native speaker proficiency models. This practice has led them to aspire to native-like proficiency; an ideal self that, over the course of four years, they have not been able to attain. Thus, it comes as no surprise that these students have also bought into the discourses (1) that being able to sustain conversations with native speakers of English is indicative of advanced proficiency, (2) that native speaker models provide exposure to language 'as it should be used', (3) that exclusive exposure to native speaker models is only logical, and (4) that nonnative speaker models are not as advantageous as their language use is deficient/filled with mistakes.

As explained in the theoretical framework, given the fragile and ego-involving nature of EFL learning (Arnaiz and Guillen 2012), instructors should be careful of the intended or unintended subliminal messages they may send their students by exclusively exposing them to native speakers models. The uncritical use of these models can create unrealistic benchmarks (ideal self) against which students assess their current proficiency (actual self). Concomitantly, when students' efforts to align their current proficiency to the ideal praised in the classroom (ideal self) render themselves fruitless, they may develop unfavorable self-concepts that leads them to see their proficiency in a

permanent unfinished state (Cook 1999) as it bears traces of their L1 (May 2014) and to, consciously or unconsciously, consider themselves to be second-class speakers.

The EFL department of this public university cannot afford to form students who, upon graduation, will step out into the world filled with insecurities/fears around their EFL proficiency. Proficient EFL speakers who believe native-like proficiency is the marker of success in the EFL learning endeavor are likely to perpetuate views that marginalize nonnative speakers on the basis of language use that bears traces of their L1. As Motha (2014) sustains, "The idea that nativeness in English is more desirable than fluent, comprehensible, NNES (nonnative English speaker) speech and an unquestioned belief in the necessity of passing [as a native] in order to be truly successful are rooted in both racism and colonialism" (94). These are narratives our graduates should not continue to spread if the aim is to break away from structures of oppression and discrimination.

The interviews I conducted revealed that the EFL department of the public university in question still continues to operate upon the native speakerism ideal, which was evident in the students' report of an underrepresentation of videos featuring non-native English speakers and a clear overrepresentation of native English speakers, especially the USA. As one student noted:

I think we all are here focused on the United States.... Somehow, if you think, here, if you think about English, you think of the United States, so... uhhh. I don't know, like, for example, in my case that I want to sound like a native speaker, I think of a native speaker in the United States, but I don't think about a British, yeah, from England, and I think that we... I don't know.... unconsciously relate English to the United States, at least here in Costa Rica, I think. So we focus mainly on that and I think professors focus mainly on that because they want us to learn their vocabulary and their idioms and their pronunciation.

Despite the fact that students reported that professors occasionally incorporated videos featuring outer and expanding circle speakers of English, the preponderance of videos featuring native English speakers mostly from the USA and England demonstrates that the latter continue to be the norm and the models to follow.

And yet, I should not so hastily blame the body of instructors alone for the students' problematic views of their L2 concept and their perceptions of native-like competence as ideal. As Motha and Lin (2014) note, the desire for native-like competence is co-constructed and permeated by the institutional, social, political and economic contexts in which the students are embedded. As such, I must acknowledge that the students' current aspiration to native-like competence is a composite picture of their own desires, the desires of teachers, the desires of the communities in which they are embedded, the desires of the institution, and the desires of governments. However, what I do question is that the EFL department in this university uncritically endorses practices that mirror socially constructed hierarchies where some hold privilege (inner circle countries) while others are excluded and marginalized (outer and expanding circle countries) in the field of EFL teaching and learning. Likewise, I question the lack of initiative in the department (1) to engage in critical dialogue with the students around the desire for native-like competence and (2) to allow students to move their L2 aspirations from an unconscious to a conscious plane.

At this point, I must clarify that the purpose of this paper is not to demonize native speaker proficiency models. Instead, I intend to raise awareness about the consequences that uncritically overlying on native speaker models can have on EFL learners' L2 self-concept. More specifically, I aim to advocate for changes in the EFL department in this public university in the direction of problematizing the terms native and nonnative speaker and diversifying the proficiency models that the students are exposed to. In this endeavor, engaging in debates with EFL students regarding the inequitable relations that the terms native and non-native speaker perpetuate would lay fertile

ground for more critical examination of (1) the spread of English around the world and (2) prescriptive proficiency standards implicit in EFL teaching practices. Equally, incorporating into the classroom proficient nonnative speaker models can also aid us in clearing the classroom of any hegemonic narratives negatively affecting the learners' L2 self concept.

As difficult as this enterprise may appear to be, some students have already developed a critical stand towards the expectation for them to sound native-like, as evident in the interview segment quoted below. This student is very emphatic that there are two perspectives through which she can assess her current EFL proficiency: her own experience as an L2 learner and circulating narratives that idealize native speakers.

I: Ok, in general, how do you feel about your proficiency in English?

KV: I feel good, cuz I think that I've been working hard... that I have improved many aspects, but it depends on the perspective... If I see it from my perspective, I have been working hard and I would say that I think it's good, but if I compare myself to a native speaker, I would say that it's not good, not at all.... So I think it's a matter of perspective, and a matter of if I compare myself to someone else, maybe I'm not good enough....

I: Who would like to look at you from perspective #2?

KV: Maybe someone that has been living in the states, or someone that masters the language very well would look at me from the second perspective....

I: Have you ever, at any point, felt pressure to be like perspective #2?

KV: Of course...

I: Can you tell me about it?

KV: Yeah, because we always try hard to speak like a native speaker, but then, I have been changing my mind because I'm thinking that I will do my best, but I will never be like a native speaker because it involves like a cultural process that I have, that I haven't been in.

I: and where do you think this pressure comes from?

KV: from outside....

I: Can you describe that 'outside'?

KV: Professors, the environment, and grades...

To conclude, just as the students reported that the trend of portraying native speaker models as ideal was more prominently found in oral communication and linguistics courses, I take the liberty here to recommend that the instructors in charge of these courses take the lead in the enterprise I here suggest. These professors (I am included among these body of faculty) should take the initiative to analyze with the students how narratives of native speakerism make their way into and are reflected on the textbooks, the teaching practices and the curriculum at large. This endeavor, Motha and Lin (2014) caution, should be carried out non-coercively and respectfully with emphasis on (1) raising awareness about what and whose desires are embedded in the curriculum and (2) envisioning ethical pedagogical practices through which students are empowered to analyze their desires and aspirations and make responsible and potentially liberatory decisions.

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**ENTREPRENEURIAL ATTITUDES OF HUMANITIES STUDENTS -  
INTERNATIONAL PERSPECTIVE (SPAIN, POLAND, NORWAY)****ACTITUDES EMPRENDEDORAS DE ESTUDIANTES DE HUMANIDADES -  
PERSPECTIVA INTERNACIONAL (ESPAÑA, POLONIA, NORUEGA)**JOANNA JARMUŻEK<sup>1</sup> & IZABELA CYTLAK

ADAM MICKIEWICZ UNIVERSITY IN POZNAŃ, POLAND

**ABSTRACT**

The aim of the publication is to show the importance of academic entrepreneurship classes in the process of effective education of humanistic studies students and the role of entrepreneurship university centers in the process of maximizing and accelerating the career opportunities. In the process of designing the research we decided to examine the entrepreneurship attitudes, knowledge and past experiences of students in Spain, Norway and Poland at the bachelor level of humanistic studies. Entrepreneurship classes are compulsory at this level of studies due to Bologna strategy. 249 students from the three countries BA level filled out the questionnaire. We initially examined the dependence of chosen variables in order to point out the features, which might help students to initiate their own business.

**Key words:** entrepreneurship; students of humanistic studies; business; business plan; acquisition of resources (raising funds); lifestyle; interests.

**RESUMEN**

El objetivo de la publicación es mostrar la importancia de las clases de emprendimiento académico en el proceso de educación efectiva de los estudiantes de estudios humanísticos y el papel de los centros universitarios de emprendimiento en el proceso de maximizar y acelerar las oportunidades de carrera. En el proceso de diseño de la investigación, decidimos examinar las actitudes empresariales, el conocimiento y las experiencias pasadas de los estudiantes en España, Noruega y Polonia a nivel de licenciatura en estudios humanísticos. Las clases de emprendimiento son obligatorias en este nivel de estudios debido a la estrategia de Bolonia. 249 estudiantes de los tres países de nivel BA completaron el cuestionario. Inicialmente, examinamos la dependencia de las variables elegidas para señalar las características, lo que podría ayudar a los estudiantes a iniciar su propio negocio.

**Palabras clave:** emprendimiento; estudiantes de estudios humanísticos; negocios, plan de negocios; adquisición de recursos (recaudación de fondos); estilo de vida; intereses.

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<sup>1</sup> Email: jarmuzek@amu.edu.pl

## 1. Introduction

Nowadays, Europe faces a new task: unemployed, young and educated adults. Due to rising unemployment and the difficult situation on the labour market in Poland, many university graduates face difficulties finding a job. The increase in unemployment coincided with a relatively constant rate of employment, which can be considered a failure of the employment support programme (Czarnik, Turek, 2012: 9). It is crucial to debate how best to prepare young people entering the labour market in these difficult conditions, because nearly two-thirds of employers have problems finding suitable employees for their businesses. Baby boomers are currently entering the labour market, which further increases the competitiveness. Young people realize that, before choosing a future profession, they should learn about the expectations of employers and the prospects of finding employment. It should be emphasized that the education received in the school system is gradually becoming obsolete and inadequate. There is a stereotypical belief that a career is guaranteed to all university graduates. More and more students realize that the capital of a potential employee applying for work in the modern labour market comprises not only the ability to think analytically and a set of soft skills (such as communication skills, teamwork, and delegation of tasks and negotiation), but also experience. It must also be remembered that it is the quality, not the quantity of experience that counts. Employers appreciate experience gained in a well thought-out and continuous way, not focusing on insignificant episodes.

Students and graduates are aware that education is a starting point for further activity and professional life. University education can be seen as a minimum, which does not guarantee anything, but without which it is difficult to achieve anything in the labour market. Students and university graduates often report that the knowledge and skills they have acquired during their studies are inadequate to meet the needs of employers. They say that academic knowledge is far detached from professional practice, and that the current education system does not prepare graduates for the jobs they are offered. However, it is worth asking whether the mission of universities is to produce "ready-made employees" or to equip them with the skills to flexibly follow changes in the labour market. On this background, universities can choose to offer dual education. This is already seen in some areas, mainly in vocational, technical training. However, more and more humanities faculties are also offering similar options. Dual education consists in combining theoretical knowledge with good-quality apprenticeships; however, this is difficult to implement in a situation where the market is dominated by small and medium enterprises that are not very innovative and whose owners are reluctant to invest in human resources (Górniak, 2014: 7). The question is, how to support young people starting their professional lives in this context?

Among the major challenges not only of the economy but also the education system is to develop programmes and mechanisms that are better adapted to the needs of employers and the labour market, and to develop entrepreneurial attitudes enabling the establishment of small and medium-sized enterprises. As Kosała and Pichur have written, shaping the entrepreneurial society is a necessary basis for building a modern, innovative and highly competitive economy (2008: 347). It is important to strengthen entrepreneurial attitudes among young people and to combine science and business at universities, as has been already mentioned. Developing small and medium-sized enterprises is beneficial not only to the people directly affected; to put the issue in the global context, the efficiency and innovativeness of small and medium-sized enterprises is crucial for the world economy in terms of reducing unemployment among young graduates. As noted by Drucker, the dynamic development of small and medium-sized enterprises creates new jobs. This is one of the essential conditions for building an entrepreneurial society (2014: 318). Self-employment is a strong alternative to paid employment. On the one hand, it creates new jobs; on the other (as shown by numerous studies), entrepreneurs are a group who retire very late in life, which is not without significance for the state (Anxo et al, 2012: 86).

Graduates represent a significant proportion of the unemployed. The unemployment rate among young people with higher education reaches 10%, which is lower than the 12% unemployment rate

among young people with no breakdown by education (Piróg, 2013: 308 – 309). The situation of people with higher education is difficult not only because of unemployment, but also because of the huge gap between the knowledge learned and the skills required in a workplace. Employers complain that school leavers have no basic skills and no responsibility or fairness in their approach to work and also the inadequacy of workers' skills with respect to the needs of the labour market, which testifies to the widespread lack of not only professional but also basic social skills allowing for adaptation to the work environment. Investment in education and an early start to working life (during the course of studies) may facilitate the transfer of young people to the labour market (Sienkiewicz, Gruza, 2009: 50 – 63).

Since 2008, a team of experts from the Polish Agency for Enterprise Development in cooperation with the Jagiellonian University has been implementing a project within the Study of Human Capital in Poland. In their latest report, "The Competence of the Poles and the Needs of the Polish Economy", the experts draw attention to the fact that, in the public discourse, the inadequacy of graduates' competence with respect to the needs of employers is put down to a lack of practical skills, while the need to extend the programme of internships is suggested as a remedy to this problem (Szczucka et al. 2014: 23 – 28). The results of the BKL indicate that the Polish labour market searches for people with transferable competence (i.e., those who are useful for a larger number of jobs) of a general or a professional character which can be provided by schools and universities but are now developed inadequately and for an insufficient number of people. On the other hand, a study conducted in 2013 showed that the vast majority of Poles of working age (65%) in no way raised their competence, even through various forms of self-education, including as many as 39% of Poles declared that they had never participated in any courses, training, workshops, internships or other forms of education. As few as 35% of Poles aged 18-64 (8.7 million people) had raised their competence through any of a variety of forms:

- 19% (4.7 million) from the said group of Poles participated in courses, training, workshops, lectures, seminars, conferences, practical classes, professional internships or post-graduate studies.
- 5% (1.2 million) took part in compulsory OHS and fire protection training.
- 14% (3.5 million) raised their competence through optional courses and training.
- 17% (4 million) studied alone (learned something new or gained experience with the help of family members, friends, colleagues, books, professional magazines, computer programmes and the Internet, and programmes broadcast via the television, radio, museums, exhibitions, galleries and science centres).
- 14% (3.4 million) of respondents participated in formal education.

Optional courses and training (other than those concerning health and safety and fire protection) were attended by 18% of the workforce (2.7 million), 10% of the unemployed (280 thousand) and 7% of the inactive population (480 thousand) (Szczucka et al. 2014: 5 - 15).

## **2. Building the entrepreneurial attitudes of university students**

There are two trends shown in the literature on the entrepreneurial attitudes of students and graduates. The first reveals that the highest levels of entrepreneurial activity are observed among students/graduates who experience the biggest problems finding a job, but also among students/graduates who have been studying entrepreneurship, or those from technical faculties. The second trend shows that very few students and graduates (5.2%) stated an intention to run their own business. There are several possible reasons for the low activity in this area. It is worth noting that the survey was carried out among students and graduates coping with the labour market relatively well (humanities represented only 5.1% of all the studied faculties), who most commonly emphasized the priority of finding work in large companies that ensure good conditions of employment. It should also be pointed out that a common cause of low activity in the field of

entrepreneurship may be that the people in students' social environment (parents, immediate family, friends) lack experience in running a business, which helps lead young people away from developing a career based on self-employment. Another factor is the lack of predisposition towards an entrepreneurial approach.

The available literature highlights the dynamics in the social perception of the phenomenon of entrepreneurship. In the 1980s, it was believed that entrepreneurs were less educated than the general population, but now the importance of education for entrepreneurial activity is emphasized. However, Timmons (1995) has argued that formal education at lower levels does not promote entrepreneurial attitudes; on the contrary, it helps propagate a "take-the-job" attitude, preparing people to work on someone else's behalf and stifling creativity and entrepreneurship (1995: 65). Therefore, academic education begins to play a crucial role in promoting knowledge on entrepreneurship and building entrepreneurial attitudes. Ibrahim and Ellis claim that the entrepreneurial skills of individuals can be predicted by considering their CVs and assessing the importance they attach to building entrepreneurial attitudes in the early and later stages of life, and by getting to know their significant others (mentors) (2002: 46). Based on this conclusion, they emphasize that children's upbringing and the education given by parents have a significant impact on an individual's life. Entrepreneurial attitudes of parents should be considered part of children's education. These authors strongly emphasize the role of entrepreneurial education from an early age as an important supplement to training in adulthood. However, as Deakins observes, excessive focus on the "personality of the entrepreneur", innate predispositions and the professional history of significant others can distract from the process of learning and development in the field of entrepreneurship (1995: 46).

It is worth noting that a number of training initiatives on entrepreneurship conducted during working lives are not able to respond to the real needs of the labour market. According to Andrzejczak, the main characteristics of entrepreneurial individuals are as follows: they have an unconventional approach to solving practical problems; they are independent in making non-routine decisions, including proximal and distal conditions; they take into account a certain degree of risk and uncertainty; they take into account liability for the potential failure of their entrepreneurship and the resulting losses; they assume that their income will be higher than the costs incurred (2008: 38). Henderson and Robertson write that the "Austrian school" represents the contemporary model of entrepreneurship. This model is based on the perception of entrepreneurs as dynamic people whose activities cover many factors at once. So perceived, an entrepreneur is a catalyst of change, crucial for economic development. The entrepreneur is expected to be an innovator who deploys new solutions and technologies (2000: 280). Many researchers divide entrepreneurial competences into two main types: easy-to-learn competences (such as, for example, functional skills in management and business) and those that are more difficult to learn (such as creativity and innovative aspects of entrepreneurship). It is often argued that entrepreneurship education should focus on the necessary preparations to start one's own business, because knowledge and entrepreneurial skills are expected to motivate people to undertake entrepreneurial activities. Here, it is necessary to stress the importance of the cultural context for the development of entrepreneurial features. Following Hofstede's concept of cultural dimensions, it can be stated that societies characterized by low power distance, low uncertainty avoidance, a masculine nature, high individualization, universality, and achievement orientation will constitute a better ground for entrepreneurial activity, characterized by proactivity, innovation and risk-taking (Drucker, 2014: 17 – 23). This trend shows that it is most common for men rather than women to opt for self-employment. Women more commonly choose to work in state-owned companies and the private sector. Because of the negative phenomena as the "glass ceiling", the "escalator", or the "sticky floor", i.e., stereotypes that keep women from advancement and professional development. Paradoxically, due to the situation of women in the labour market and the difficulties they encounter

in breaking through the “glass ceiling”, nearly 35% of women decide to start their own business (often during their studies).

### **3. A student business idea, or step by step to your own business**

Education is one of the most important factors that distinguish entrepreneurs from non-entrepreneurs, because it plays the key role in anticipating and developing entrepreneurial features (Lee et al., 2008: 28). Educational programmes should focus on issues such as encouraging autonomous, independent and innovative challenges, and should pay attention to the development of creativity and risk-taking. Students should be encouraged to take decisions during classes, and, most importantly, their bad decisions should be accepted as valuable life experience. Lebret describes the value of experience gained by young investors from Silicon Valley in taking erroneous decisions in their first businesses and believes that such experiences are very significant for young people, and are actually assets, teaching young businesspeople the mistakes to avoid in the future and the measures to take in order to cope with difficulties (2007: 17 – 24).

Entrepreneurship and innovativeness are the main factors which affect the dynamics of socio-economic development and create competitive micro- and macro-economic advantages. Therefore, significant emphasis should be placed on building and promoting entrepreneurial attitudes among the younger generation. As noted by Koźmiński, entrepreneurship occurs where the two areas meet: opportunities, and the ability to achieve economic non-common benefits; and the presence and activity of entrepreneurial people who are capable of going beyond the common patterns of action (2005: 163). At the academic level, this project is implemented by universities developing entrepreneurial attitudes and activities together with pre-incubators and incubators. As noted by De Faoite, Johnston and van der Sijde, there are still very few programmes or initiatives that promote entrepreneurship and take into account the cultural, social and political aspects relating to the opportunities for cooperation between education and entrepreneurs (De Faoite et al. 2003, 431 – 437).

In this situation, classes on academic entrepreneurship conducted in collaboration with the Academic Incubators and Pre-incubators of Adam Mickiewicz University in Poznań (UAM) are a great way for students to acquire theoretical knowledge combined with practical skills and experience at the study stage. Few of those studying will take up the challenge to establish and run their own businesses. The most common concerns of young people are a lack of real business ideas, ignorance of procedures, a lack of positive experiences among people from their immediate environment, and a lack of information on support in establishing and running business (both in terms of procedures and financing). The academic course at Adam Mickiewicz University (UAM) consists of 30 hours of lectures and classes conducted by business theorists and practitioners. They are designed to provide students with theoretical knowledge on entrepreneurship, business strategy, market segmentation (diagnosis of the needs of the target group of customers, particular characteristics of products or services, etc.), acquiring suppliers and business partners (e.g., Business Angels), knowledge of distribution channels for services and products, marketing, formal and legal regulations related to setting up a business, and familiarity with institutions supporting entrepreneurship. In addition to the theoretical part, the classes also provide workshops on self-presentation, negotiation with customers, or business presentations. Students learn how to properly develop a business plan in practice, how to set up a business step by step, how to raise funds for business, how to manage finances in one's own enterprise, and what insurance and taxes must be paid by business owners. Another advantage of this course is undoubtedly the opportunity to meet young entrepreneurs, who make students acquainted with the realities of starting and running a business. Participants learn about opportunities and the most common problems associated with self-employment. According to the students themselves, business meetings in the Poznań Science and Technology Park, UAM, are particularly valuable, as they are given the

opportunity to participate in workshops on entrepreneurship and learn about the opportunities offered to young entrepreneurs by academic institutions supporting student business.

#### **4. Psychological aspects of entrepreneurship**

In order to analyse this phenomenon, we have to ask ourselves what is entrepreneurship? This term is used in research reports, scientific publications and colloquial language. It is usually associated with setting up and running one's own business and achieving success, or with the way in which the business is run. "At present, the importance of entrepreneurship [has] increase[d] in management science because entrepreneurship is treated as part of a broader activity and innovativeness and is considered an important factor which makes it possible to effectively deal with both tensions in the global economy and the rapidly changing business conditions" (Kaczmarek, Kaczmarek-Kurczak, 2012: 50). It should be emphasized that entrepreneurship is also a form of behaviour and the way in which we perceive the world and ourselves. P. Drucker sees the entrepreneur as a person who "knowingly and actively searches for change, [and] directs and controls its course to finally exploit it as an opportunity" (Mrozowicz, 2010: 13 – 23). In this sense, entrepreneurship is defined as a range of competencies and skills associated with personality and character which facilitate or hinder certain behaviours of an individual (Dowigałło, 2004: 175 – 176). Entrepreneurship is a form of conduct that involves the propensity to undertake new, risky and unconventional projects, and of initiative in searching for and implementing them. This action aims at development and is innovative by nature. Entrepreneurship can be characterized as a two-pronged activity: obtaining maximum benefits from the use of what exists and continuously creating something new or innovative. Entrepreneurial behaviour and thinking are desirable in any professional activity, and they are the subject of training both at the level of the employing company and at the level of future employees.

Universities have placed increasing emphasis on the development of academic entrepreneurship as one of the processes of lifelong learning to meet the rapidly changing needs of the labour market. Opening up to business and building the capacity to release entrepreneurship potential among students and personnel represents a new form of higher education development. The current model of a university - based on education and research - has been extended to include entrepreneurship, understood as the formation of active behaviours to maintain independence in the market. Activity in the field of business education and practical support for new companies created based on the know-how of persons related to research is termed "academic entrepreneurship" (Banerski et al., 2009: 6 – 8). Nationwide research considering university entrepreneurship conducted by the Polish Agency for Enterprise Development shows that "the level of development of academic entrepreneurship understood as running one's own spin-off or spin-out is negligible. As few as 6% of respondents ran their own businesses (9% of academic staff and 2% of students). Students (51%) would like to have their own businesses much more frequently than academics (31%)" (Banerski et al., 2009: 10 – 11). The study shows that as many as 88% of researchers and 80% of students estimate that in their curriculum universities offer subjects conducive to entrepreneurial activities and confirm their suitability.

Hessel Oosterbeek, Mirjam van Praag and Auke IJsselstein show that there is no simple relationship between centres of entrepreneurship and the development of entrepreneurial skills, as they are strongly correlated with personality traits and temperament. Their study also confirms that the entrepreneurship of individuals should be seen as an approach to life, which is a natural extension of personal tendencies which will translate into specific behaviours, thoughts and emotions in relation to various life events. Therefore, measures taken by offices for entrepreneurship will be effective as long as they support the internal predispositions of those concerned, but they are unable to radically change their temperament and convictions resulting from life attitudes, which is confirmed by numerous studies discussed later in this paper (Oosterbeek, 2010: 452). Einar A. Rasmussen and Roger Sørheim have developed a similar thesis.

In their study, they demonstrated the role of practical activities, skills and competencies associated with entrepreneurship in the development of entrepreneurial attitudes based on the predispositions of personality and temperament (Rasmussen, Sørheim, 2006: 185 – 194). Changing a life attitude will always be based on increasing - through life experiences - the availability of specific behaviours and on expanding the knowledge and emotional experience associated with the object of this attitude, which is why practical training for entrepreneurship is more effective (Aronson, 2016: 21 - 38). The study conducted by Georg von Gravenitz, Dietmar Harhoff and Richard Weber was even more interesting. They studied the skills and knowledge of students concerning entrepreneurship before and after compulsory classes in this field (Gravenitz et al. 2010: 96 – 99; 103 – 104). They have proved that entrepreneurial classes conducted with an emphasis on the practice and development of students witness a significant increase in knowledge, skills and entrepreneurial behaviour in their daily activities, and that they change their attitude towards entrepreneurship. In this way, they prove that the work on all elements of life attitudes can lead to effective change at the behavioural, cognitive and emotional levels associated with the object of this attitude. The authors emphasize that comparable results were obtained in the course of research at several universities. Moreover, Vangelis Sonitaris, Stefania Zerbinati and Andreas Al-Laham confirm that practical education in this field affected the beliefs, approaches and entrepreneurial behaviours of students. At the same time, they proved that the classes had a significant influence on careers and the development of emotional intelligence in the studied group (Sonitaris et al. 2007: 566 – 591). The impact of emotional intelligence on entrepreneurship is analysed further in this paper.

## 5. Entrepreneurship and personality

Since "entrepreneurship is an immanent and creationist part of personality, it is a set of personal characteristics that manifest themselves in various social and professional roles, characterized by a relatively stable range of specific personally, socially and situationally conditioned behaviours" (Mrozowicz, 2008: 558). Entrepreneurship is thus a life attitude, which is a causative factor necessary to undertake entrepreneurial activities (Sudol, 2008: 9 – 10). The said attitude is composed of: personality traits (such as resourcefulness, initiative, independence, commitment, creativity, resistance to stress, a strong will and self-discipline), behaviour (activities of daily living, directing, controlling, monitoring, decision-making, risk-taking and assertive behaviour), as well as personal competence and social competence corresponding to emotional intelligence (Szelagowska-Rudzka, 2008: 142 – 143).

Emotional intelligence is the ability to recognize one's own emotions and those of other people and to guide them through appropriate social behaviour. People with high IQs do not always have high levels of emotional intelligence. Emotional intelligence is affected by empathy, the ability to look at oneself and others from a distance, and the ability to establish contacts, build consensus and cooperate. According to Daniel Goleman (2012: 25 – 27), emotional intelligence consists of emotional competence, which include personal competence and social competence. Personal competencies determine the extent to which we deal with ourselves, and they include self-awareness, self-regulation and motivation. Social competencies decide how we deal with others. These competencies include empathy (understanding others: sensing others' feelings and perspectives and taking an active interest in their concerns, tolerance for diversity and supporting the individuality of other people) and social skills, also known as interpersonal skills.

A series of studies has been conducted to verify the relationship between an entrepreneurial attitude and specific personality traits, character and forms of behaviour. Many researchers have sought relationships between the features of the functioning of entrepreneurial individuals and the theories of personality developed by Hans Eysenck and the five-factor model created by Paul Costa and Robert McCrae, also known as "the Big Five". The Eysenck theory of personality was initially based on two dimensions: introversion vs. extraversion and neuroticism vs. emotional balance, a third dimension – psychotism – has been added with time. Based on the intensity of the

characteristics, the following types of temperaments have been defined: sanguine, choleric, melancholic and phlegmatic (Strelau, 2012: 75-79). And the five-factor model of personality (PMO) includes the following factors of personality: neuroticism vs. emotional stability, extraversion vs. introversion, openness to experience, agreeableness vs. antagonism and conscientiousness vs. carelessness (Strelau, 2012: 63-65).

Furthermore it has been studied the intensity of personality traits identified in the studied group (entrepreneurs) and a control group (the budget sector) and Mrozowicz discovered that "entrepreneurs were characterized by greater extraversion. Statistically, more common attitudes were: optimism, openness to experience, pro-social attitudes, assertiveness, high self-esteem, a deficit of stimuli, sensation seeking, stress tolerance, the ability to make decisions in difficult situations, a sense of inner locus of control, creativity, activity and independence" (2010: 16 – 18). On the neuroticism-emotional stability scale, entrepreneurs proved to be statistically less neurotic, meaning that the probability of such behaviours as irrationality, timidity, languor, emotionality, attitudes of avoidance, a sense of guilt and low self-esteem were significantly less common than among public sector employees. Furthermore, Magdalena Kaczmarek and Piotr Kaczmarek-Kurczak (2012: 55 – 63) investigated the relationship between the theory of the Big Five and the characteristics of entrepreneurs. The strongest relationship was found in relation to the tendency to take risks, followed by openness to experience, emotional stability, conscientiousness, extraversion, a sense of efficiency and internal motivation. Similarly, a study conducted by Ludvig von Mises, Joseph A. Schumpeter, David C. McClelland, James A. Timmons and Robert H. Brockhaus revealed a significant correlation between entrepreneurship and qualities such as decision-making, innovativeness, the need for achievement, the willingness to take risks and an internal locus of control (Mushtaq, 2010: 204).

## 6. Entrepreneurship and subjectivity

Psychologists emphasize that entrepreneurship involves a high awareness of behaviour and responsibility for oneself and one's own life, and in this context entrepreneurs manifest a subjective approach to life. Kazimierz Obuchowski, the originator of the concept of man as a subject, indicated that man in this sense is the cause of action, a designer, a creator of his own life, an active person, a decision-maker who occupies a specific position in the structure (i.e., the surrounding reality) and fulfills his own roles and responsibilities. Subjectivity is implemented through the sense of being someone and having one's own individual and social identity. Man as a subject believes that his own activity largely depends on himself. To become a subject, man needs to make conscious assumptions about himself and choose his own path of development. A sense of subjectivity expands the potential for individual development (including education) and makes one's personality flourish. Man is an active entity taking responsibility for his own life (Jarmużek, 2014: 240 – 245). Therefore, Janusz Reykowski (1989: 201) defines subjectivity as self-determination, i.e., having an internal source of causality, understood as an independent activity directed by independently selected or created objectives.

The concept of man as a subject is based on the conviction that man alone should define his goals, plans and projects concerning himself and the world around him. When an individual looks for the meaning of life, when he or she feels responsible for it, he or she aims for self-creation. Creative activity throughout one's lives will mean innovative activities which are non-conformist and which give rise to a new surrounding reality or redefines oneself. The degree of human maturity can even be measured by one's flexibility, preparedness for reflection and change in a constantly changing reality, and also by fidelity to what is most important to oneself. The ability to reorient and adapt a creative approach to life is a direct result of self-confidence, certainty and identity. In order to achieve that, a human turns out to be necessary to change competencies, attitudes and beliefs primarily of the adults who are incapable of recognizing meanings consistent with social reality, that is, with their own developmental interests. Czapinski and Panek described it as the ability to

creatively restructure experience, the ability to subjectively organize one's own life. It is worth noting that, in light of the research, it can be concluded that people with a higher level of education are more flexible in thinking and behaviour, more aware of their needs, and are able to operate more effectively in new situations, requiring the creation of new adaptive behaviour (2015: 433 - 456).

## 7. The international research (Spain, Poland, Norway): materials and methods

The project has been implemented since 2014 as part of statutory research. We studied students in humanities in Poland (Adam Mickiewicz University in Poznań, Faculty of Educational Studies, Pedagogy), Spain (University of Córdoba, Department of Education, teaching faculties) and Norway (University of Agder, Kristiansand, Faculty of Humanities and Education, teaching faculties). Our goal is also to study students of humanities in Italy. The aim of the conducted research was to get to know the entrepreneurial attitudes of students in European countries on the example of selected four countries (Poland, Spain, Norway and Italy), to learn the relationship between mental traits, possessed knowledge and entrepreneurial activities with the help of a developed research tool and the analysis of student support in business and propagating the idea of academic entrepreneurship. As part of international cooperation, we have contacted the Education Departments and Entrepreneurial Centers in these countries.

The diagnostic survey method was used to examine students' attitudes. A research tool was designed - a survey questionnaire, which consisted of three parts: a test by Professor Walter Good, questions about entrepreneurial knowledge and business experience, and the specifications. The questionnaire was analyzed by competent judges, thanks to which the verification and refinement of the research tool was carried out. Next, the compliance of the competent judges was analyzed - whether the evaluators' assessments differ in significance from each other or whether they are similar. The result obtained was 0.93 in the Kendall test, therefore the convergence of the answers was 93%. A small discrepancy in the judges' opinions indicates that the applied research tool is slightly sensitive to the subjective assessment of the respondent.

The first part of the questionnaire is Walter Good's Test, which examines the level of predisposition to being an effective entrepreneur (Good, 1993; 2008). Research by the creator of this tool indicates that besides knowledge of how to run a company, how to hire and manage people, certain predispositions are necessary to increase the probability of success. Walter Good examined people who were successful in the field of entrepreneurship and identified the following characteristics of an entrepreneurial person: positive response to challenges, willingness to learn from own mistakes, manifesting initiative, perseverance in pursuing the goal, control over their own impulses and creative. An entrepreneurial man is characterized by specific features (part A of the test)<sup>1</sup>, behavioral patterns (part B of the test)<sup>2</sup> and lifestyle (part C of the test)<sup>3</sup>. In part A of Walter Good's Test researched person could receive from 0 to 14 points. In part B of the test from 0 to 46 points, and part C of the Walter Good's Test from 0 to 14 points. That is 74 points in total. The second part of the tool consisted of questions about the business experiences of students of humanities studies and their parents, knowledge about starting a business, raising funds, creating business plans. The respondents were also asked about the type of activity and interests carried

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<sup>1</sup> Sample questions Part A: Did you participate in the initiation of social welfare clubs, social organizations, charity projects, etc.? Did you participate in school life or did you play any sport? Were you expected to do small work at home before you were 10?

<sup>2</sup> Sample questions Part B: Are you a man who, if he decides to do something, does it and nothing will stop him? When you are dealing with a stalemate in a group, are you usually the person who breaks the stagnation and initiates a further process? Do you usually ask for advice from people who are older and more experienced? Even if people tell you, "This can not be done", do you have to check it yourself?

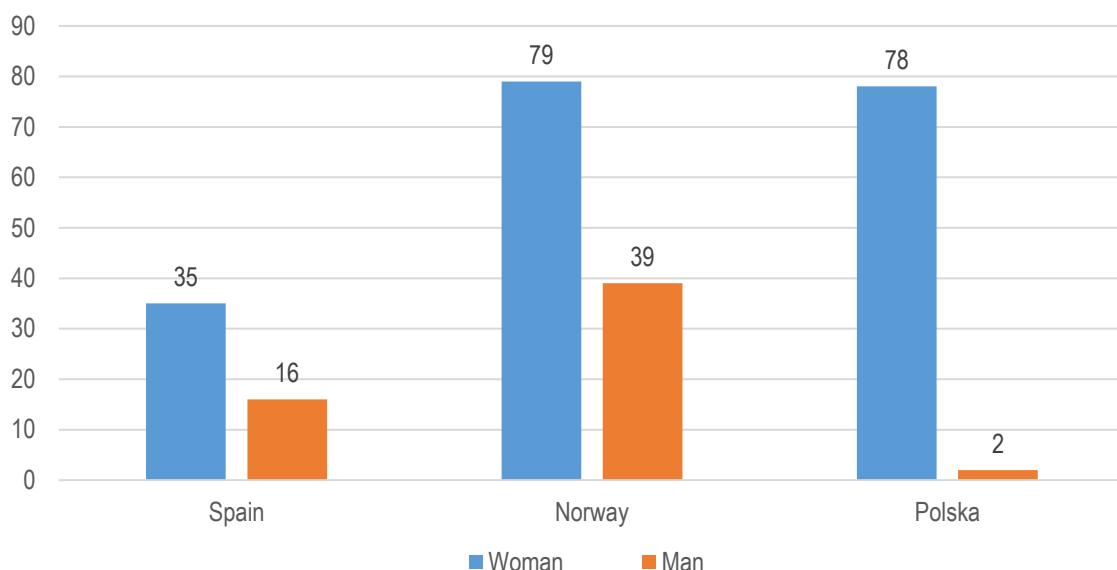
<sup>3</sup> Sample questions Part C: Are you willing to sacrifice your family life and accept a reduction in earnings to achieve business success? Do you set yourself clear goals when starting a task? Do you like working on projects that will take 5-10 years to complete? Do you think it's possible to work overtime to achieve the goal?

out in their free time, indication of the characteristics of entrepreneurial people, self-evaluation of their own level of entrepreneurship, further educational and professional plans and the usefulness of knowledge and skills acquired during their studies for the future profession and carried out work. The students were asked to give their gender, age, type and degree of studies, place of residence, country in which they want to live and work after graduation and the degree of financial independence.

The research has started in 2015. In total, 323 humanities students in Spain, Norway and Poland were examined. For further quantitative and qualitative analysis, 309 questionnaires filled out by students at the bachelor and master level were admitted. Some of the surveys were rejected from the analysis, because they were incomplete or the answer indicated a misunderstanding of some questions. For the comparative analysis of entrepreneurial attitudes of humanistic students at the bachelor level, 249 questionnaires were used: 51 from Spain, 118 from Norway and 80 from Poland. The research group consisted of 21% Spanish students, 47% Norwegian and 32% Polish. We are aware that these are not parallel groups, but in both Spain and Norway we have encountered some difficulties in obtaining surveys. Spanish students (even at the request of professors) did not want to stay after classes and to complete surveys, it was their free time, which they preferred to spend with their relatives. There were also often language problems. In Norway, we encountered a very specific situation - the respondents perceived some of the questions as too personal, despite ensuring the anonymity of research and the use of results only for scientific purposes. There were some students, who did not give us back the questionnaires, because they interpreted some of the questions as sensitive: Have you ever worked? (question from the second part of the tool) Do you often get sick? Do you have trouble sleeping? Do you have a savings account? (Walter Good's Test questions from parts A, B and C).

## **8. Main results of research**

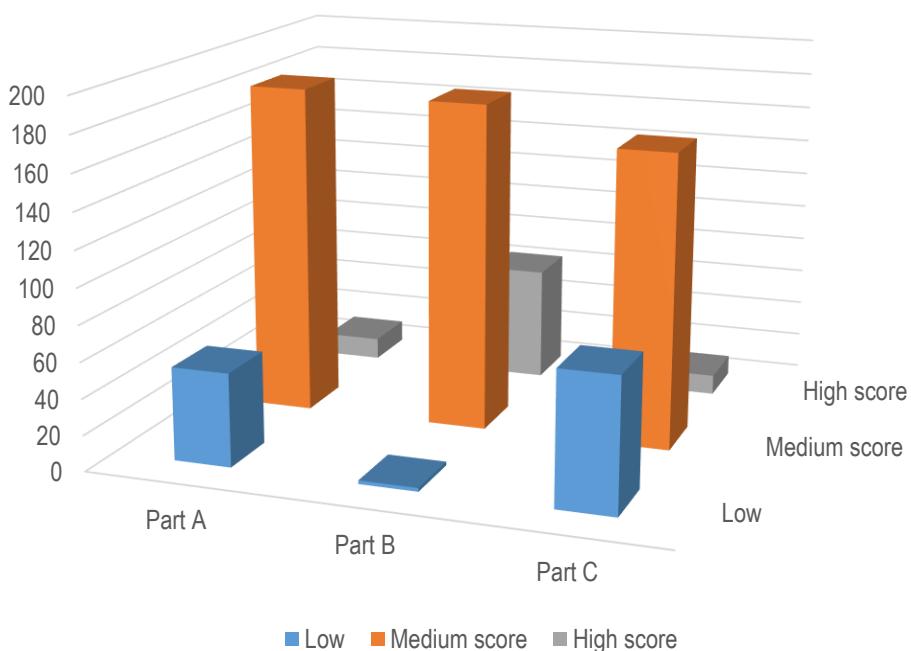
Students studying in pedagogical fields are mainly women - this disproportion is especially visible in Poland. The research group consists of 192 women and 57 men (see Figure 1). Both in Spain and Norway - men constitute 1/3 of the population of the studied national group. Spanish pedagogical faculties (Faculty of Educational Sciences) can be divided into Kindergarten Teaching and Elementary Education; and both can also be carried out in the form of bilingual studies, entitling students to teach English in the classroom. Norwegian pedagogical studies prepare for teaching at three levels of education: pre-school (1 - 5 years, optional education), 6 - 12 (elementary education) and 13 - 15 (lower secondary education). The primary and lower secondary education is free and compulsory. Students can continue their education in high school, which is also free and voluntary.



*Figure 1. Gender of humanistic studies students in numbers divided into countries covered by the study. Source: Own research.*

After collecting the questionnaires, raw results from the Walter Good test were recalculated in individual subscales and a general and three partial scores were obtained, answers from open questions were encoded and statistical analysis of all collected data was carried out. The Statistica program package was used for the calculations. While testing the statistical dependencies, student's or chi<sup>2</sup> t test was applied, depending on the type of variables analyzed. The strength of correlation between the results obtained by the study of a person in individual parts of the questionnaire was analyzed at a level of significance equal to or less than  $p \leq 0.05$ . Cluster analysis by agglomeration of selected variables allowed to identify certain groups of variables in a significant way related to each other. The Euclidean distances were very small and pointed to significant dependencies between the country in which the research was conducted and the financial dependence and professional activity of the subjects, as well as the business experience of the parents of the respondents. The second group of related variables are the interrelations between the life activity of the subjects, the knowledge of entrepreneurship, and the characteristics of the entrepreneur. The above dependencies will be discussed later in the publication.

In the analyzed results of Walter Good's Test there was no relationship between nationality and other variables - students from Spain, Norway and Poland obtained similar results. Moreover, the distributions of responses in parts A, B and C of Walter Good's Test are close to the normal distribution. However, it is worth emphasizing that in the studied population of humanistic students, the least scores were obtained in the case of high scores in part A of Walter Good's Test (diagnosing entrepreneurial features), low scores in B part of Walter Good's Test (specific behavioral patterns), and high scores in part C of the Walter Good's Test (diagnosed lifestyle) (see Figure 2).



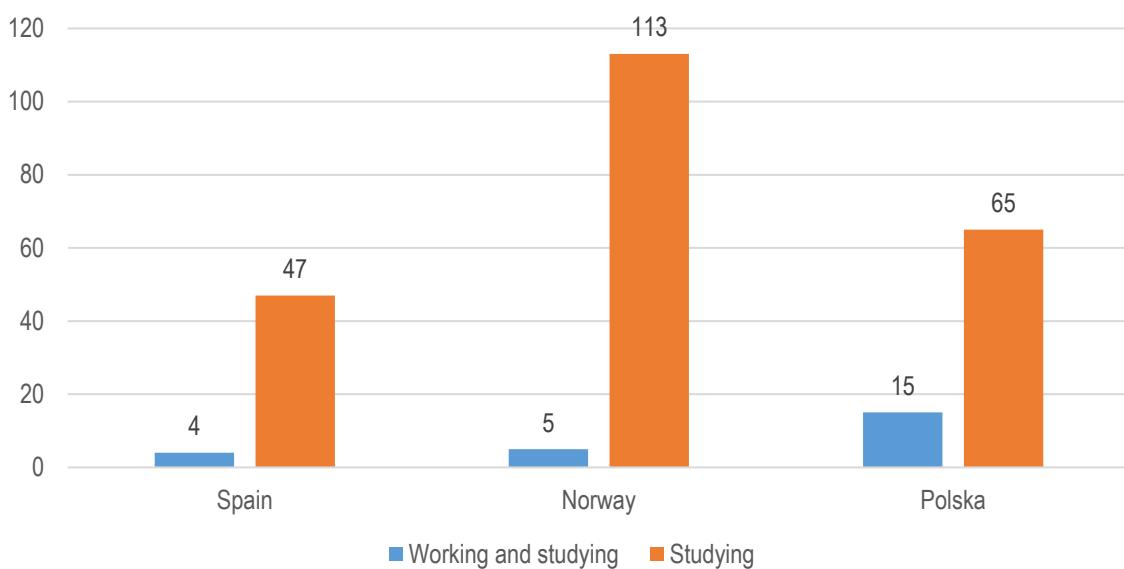
*Figure 2. The results of humanistic studies students divided into the Walter Good test subscale. Source: Own research.*

Significant relations between the Wood Test and other variables were noted in the case of analysis of the business experience of parents researched students. This variable had a significant impact on the results of Walter Good's Test in part A, concerning possessed entrepreneurial characteristics (correlation force 0.34) and weak, although significant in Part B of Test, concerning the behavior patterns held - in this case, the correlation strength was 0.21.

Those who achieved high scores in parts A, B and C of the Walter Good's Test, much more often described themselves as enterprising people, were able to indicate the essential characteristics of an entrepreneur (correlation force 0.30), had knowledge of the necessary formalities related to setting up a business (correlation force 0.28), about where to obtain the necessary funds (correlation force 0.30), and were able to estimate how much they need money to open a business (correlation force 0.26). The strongest relationships were revealed between part C (lifestyle) and the mentioned variables. What is important - entrepreneurial people were aware of their own characteristics and behaviors facilitating being entrepreneurial, they were also able to indicate what they can do (what skills and knowledge) to increase their own attractiveness on the labor market (correlation force 0.32), they were also able to indicate where they can derive business ideas (correlation force 0.23).

During statistical analyzes, it turned out that nationality is a variable that differentiates respondents in several important areas: knowledge of humanities students in the field of entrepreneurship, business experiences of the respondents and their parents. In all of these areas, significant correlations between Polish nationality and these variables were noted.

Analyzing the economic activity of the studied humanities students, only 8% of Spanish students and students, 4.4% of Norwegians work. Among Polish respondents, as much as 23% of the population points to combining studies and paid work. This dependence is strong (correlation force is 0.43) and allows to state that Polish students and students most often reconciled their work with studies. Both in Spain (92%) and Norway (95.6%), students most often pointed to the lack of economic activity (see Figure 3).



*Figure 3. Professional activity of humanities students with the division into countries covered by the study. Source: Own research*

Importantly, the job activity of students significantly correlated positively with the indication of other activities (besides school and job). It was the people who worked and learned, and most often developed their interests through a variety of life activities. In Poland, it was usually volunteering and hobby interests or sports, while in Norway and Spain, church and sports activities.

It is worth emphasizing that people who thought that their studies would be useful in increasing their attractiveness on the labor market were much better oriented in the issues of academic entrepreneurship (correlation force 0.29). Those students also were able to point to specific skills and knowledge that increased their attractiveness on the labor market and what they would like to learn. These relationships were especially evident for students who combined educational and commercial activity.

What is important, Poles were also a group that most often showed that they had sufficient knowledge of where to get business ideas (the strength of dependence is 0.45) and has sufficient knowledge about how to set up a company (correlation force up to 0.61) and how to raise funds for starting a business. Spanish and Norwegian students more often gave the internet source as their only source. It can be concluded on this basis that Polish students received very useful knowledge and skills in the field of academic entrepreneurship and that's why they managed so well in questions about theoretical and practical knowledge related to running their own business.

Another of the important correlations correlated with the nationality of humanities students is the business experience of the parents of the respondents - 39% of the parents of the surveyed population had experience in running their own business. Only in the case of Poles, the group of active or former entrepreneurs was more numerous than the population of parents who did not have any business experience. The parents of Polish women and Poles most often (compared to Spain and Norway) were or are entrepreneurs (see Table 1 and Figure 2). It is worth emphasizing here that in Norway there is a specific regularity: as many as 34% of employed people work in the state sector, in Spain only 17% and in Poland 25%.

Table 1.

Business experience of parents of humanities students in the countries studied. Source: Own research

	<b>Lack of experience</b>	<b>Experience</b>	<b>Summed up</b>
Spain	40	11	51
Norway	76	42	118
Poland	37	42	80
Summed up	154 (61%)	96 (39%)	249 (100%)

To sum up, the research showed the role of classes promoting academic entrepreneurship and showed the impact of previous parental or own business experiences as well as on the level of entrepreneurship knowledge and behaviors facilitating being an entrepreneur. The studies conducted among humanities students also showed a relationship between having features that would facilitate being an entrepreneurial person and combining educational, work and out-of-school activities. Importantly, people who achieved high scores in the Walter Good Test subscales were more likely to have thorough and adequate knowledge of entrepreneurship.

In the course of the analysis, it turned out that in the studied population of humanities students there is a significant relationship between nationality and possessed knowledge in the field of entrepreneurship. Polish students were characterized by the most appropriate knowledge about starting and running their own business, the greatest professional activity and most often owned parents of entrepreneurs (Figure 4). In the conducted study, it was not possible to obtain equality of the examined group in terms of gender. However, at the humanities studies there is a constant overrepresentation of women - that's why the conclusions from the research are representative for this study group.

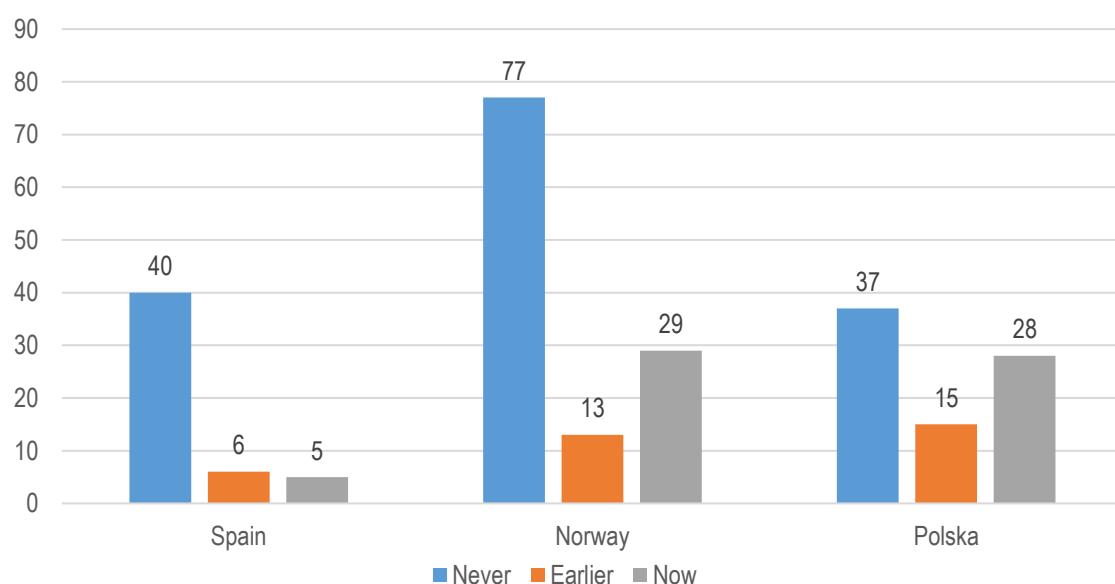


Figure 4. Business experiences of parents of studied humanities students. Source: Own research.

## 9. Conclusions

In the multicultural and multifunctional modern work environment, the role of entrepreneurial activity is becoming more and more important. This activity should be based on knowledge and dominated by modern information technology that is less dependent on local conditions and operates in global markets. Unquestionable advantages of learning entrepreneurial skills during one's studies include opportunities to gain qualifications and work experience, to learn about social

roles (giving employment to other people, etc.), to work towards greater financial independence, or, perhaps most important, to gain the ability to perform a satisfactory job earlier in life than students who work in a less independent way. According to research conducted by Deloitte among students and university graduates, 80% of people who gained experience in running a business during their studies indicated that this experience was useful in their later career, both in relation to looking for a job (they were more appreciated by potential employers) and in their subsequent work. Reflections on subjectivity and intentionality refer in a meaningful way to problems of entrepreneurship perceived as a life attitude. Man as a subject creates his own life consciously in accordance with his aspirations, beliefs and values. Being a subject takes courage, because one then becomes a designer of one's own life.

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## REPRESENTATIVIDAD DE LAS MUJERES EN LOS ORGANISMOS DE COGOBIERNO DE LAS INSTITUCIONES DE EDUCACIÓN SUPERIOR DE ECUADOR. EL CASO DE LA UNIVERSIDAD LAICA ELOY ALFARO DE MANABÍ

## REPRESENTATION OF WOMEN IN THE ORGANIZATIONS OF COGOBIERNO OF THE INSTITUTIONS OF HIGHER EDUCATION OF ECUADOR. THE CASE OF THE UNIVERSITY LAICA ELOY ALFARO DE MANABÍ

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JHESENIA SACOTO LOOR<sup>\*1</sup> & MERCEDES OSUNA RODRÍGUEZ<sup>\*\*</sup>

UNIVERSIDAD LAICA ELOY ALFARO DE MANABÍ (ECUADOR)<sup>\*</sup>  
UNIVERSIDAD DE CÓRDOBA (ESPAÑA)<sup>\*\*</sup>

### RESUMEN

La representatividad de las mujeres en las instituciones de Educación Superior subyace en los logros de los movimientos feministas durante los años 70 por la participación de las mujeres en el ámbito público. El presente estudio analiza la representatividad de las mujeres docentes, con una muestra de 341 mujeres docentes, cuya información fue obtenida del Sistema Integrado de Información de Talento Humano, que participan en varias funciones de cogobierno y direcciones departamentales administrativas y académicas de la Universidad Laica Eloy Alfaro de Manabí (ULEAM). Los resultados muestran que a pesar de que existen normativas que garantizan la igualdad de género en la práctica no se cumple, pues la representatividad de la mujer en la ULEAM es del 9.3% de acuerdo a la población de mujeres docentes (341). Se recomienda indagar en los factores que impiden la aplicación efectiva de la política pública e interna de la institución respecto a representatividad y principio de igualdad de género.

**Palabras claves:** representatividad de mujeres; educación superior; igualdad de género; participación.

### ABSTRACT

The representativeness of women in higher education institutions underlies the achievements of feminist movements during the 70s by the participation of women in the public sphere. The present study analyzes the representation of women teachers, with a sample of 341 women teachers, whose information was obtained from the Integrated Human Talent Information System, participating in various co-government functions and administrative and academic departmental directions of the University Laica Eloy Alfaro de Manabí (ULEAM). The results show that although there are regulations that guarantee gender equality in practice, it is not fulfilled, since the representativeness of women in ULEAM is 9.3% according to the population of women teachers (341). It is recommended to investigate the factors that impede the effective application of the public and internal policy of the institution regarding representativeness and the principle of gender equality.

**Key words:** representation of women; higher education; gender equality; participation.

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<sup>1</sup> Email: z62salor@uco.es

## 1. Introducción

La igualdad de género es uno de los retos más importantes en la Educación Superior, porque requiere de una comprensión desde el enfoque de derechos, como es erradicar la desigualdad de género establecido en los compromisos adquiridos durante la Conferencia Mundial de Beijing (Organización de las Naciones Unidas, 1995). A medida que la mujer ha empezado un proceso de empoderamiento, como sujeto de derechos, y ejercer su derecho a la educación, ha asumido retos de llegar a puestos representativos en cualquier ámbito donde se ha profesionalizado (Kabeer, 2001).

Según el estudio sobre Igualdad de Género y Educación Superior: Retos por alcanzar en la Unión Europea de Matarranz & Ramírez (2018) se concluyen que, a pesar de los avances en el acceso a la educación, aprobación de políticas en relación a la igualdad de género, aún la representatividad de las mujeres en máximos cargos en instituciones de Educación Superior es baja. Estudios realizados en varios países de América Latina, sobre representatividad de las mujeres (Pérez, 2018) en cargos directivos en las instituciones de Educación Superior (Allison, Gregoratti, & Tornhill, 2019), concluyen que representatividad siguen siendo limitada y con desigualdades salariales (Bolaños, 2005) en puestos directivos entre hombres y mujeres.(Ordorika, 2015).

En Ecuador, desde la Constitución del 2008 se declara el principio de igualdad y derechos de participación que establecen que la ciudadanía podrá desempeñar empleos y funciones públicas con base en méritos y capacidades, y en un sistema de selección y designación transparente, incluyente, equitativo, pluralista y democrático, que garantice su participación, con criterios de equidad y paridad de género, igualdad de oportunidades para la personas con discapacidad y participación intergeneracional. A su vez, todas las instituciones de Educación Superior debían reformar sus normativas internas que garantizaren el cumplimiento de los derechos, mediante la aplicación de políticas internas.

La reforma del estatuto de la Universidad Laica Eloy Alfaro de Manabí 2014 (ULEAM) establece en su Art. 7, que el cogobierno, consiste en la dirección compartida por parte de los diferentes sectores de la comunidad de la institución, docentes, estudiantes y funcionarios acorde a principios de calidad, igualdad de oportunidades, alternabilidad y equidad de género (Consejo Universitario, 2014).

En tal razón la institución cuenta con varios espacios de cogobierno en el que participan representantes de autoridades, docentes, estudiantes y funcionarios para la toma de decisiones que beneficien a toda la institución. Además cuenta con espacios de apoyo, asesoría, en donde resuelven o proponen al Consejo Universitario, como Consejos y Comisiones; también, según el organigrama de la institución se encuentran Departamentos Centrales de Coordinación Académica y Administrativa, que son: Admisión y Nivelación Universitaria, Planeamiento Académico, Investigaciones, Promoción y Desarrollo Cultural, Evaluación Interna, Información Bibliográfica y Servicios Educativos, Bienestar Estudiantil, Técnico, Consultoría y Asesoría Jurídica, Vinculación con la Colectividad, de Relación y Cooperación Internacionales y de Edición y Publicaciones, Medio Ambiente, Seguridad y Gestión de Riesgos. A nivel de facultades existen organizacionalmente Decanatos y Coordinaciones de Carrera; espacios que administran académicamente la educación en la ULEAM.

El presente estudio analiza la representatividad de las docentes en espacios de tomas de decisiones de la Universidad Laica Eloy Alfaro de Manabí (ULEAM) durante el periodo 2016-2018 a partir de la información obtenida del Sistema Integrado de Información de Talento Humano de esta institución y nos ha permitido analizar la frecuencia y el porcentaje de mujeres docentes que participan como miembros en los distintos órganos de cogobierno de esta universidad.

## 2. Marco teórico

### 2.1. Marco normativo sobre la igualdad de género en Educación Superior

La igualdad de género nace como un principio y derecho evocado por los grupos de movimientos de mujeres para romper un sistema patriarcal que ha discriminado, violentado y oprimido a las mujeres durante siglos y que busca la armonía entre hombres y mujeres en igualdad de oportunidades y condiciones tanto el ámbito privado como en el público (Melero, 2010).

En Ecuador desde el año 2010 inició un proceso de cambios en todas las normativas, incluyendo las de Educación Superior, estos cambios asumen compromisos internacionales que garantizan el cumplimiento de los derechos:

A nivel internacional los compromisos suscritos por Ecuador y ratificados fueron: La Cuarta Conferencia Mundial sobre la mujer (Organización de las Naciones Unidas, 1995); la Convención sobre la Eliminación de todas las formas de discriminación contra la mujer (Committee on the Elimination of Discrimination against Women, 2006); la Cumbre del Milenio (Naciones Unidas, 2015) en el que estableció 8 objetivos, de los cuales tres se refieren a la igualdad entre los géneros, autonomía de la mujer, reducción de la mortalidad en la infancia y al mejoramiento de la salud materna.

Estos compromisos internacionales asumidos y reflejados en la Constitución Política del Ecuador (Tribunal Constitucional del Ecuador, 2008) fueron el resultado de la incidencia política de las organizaciones de las mujeres, presentes en el país desde el inicio de la democracia en el año de 1979, posteriormente en los años 80 y 90 se logra instaurar el análisis de la violencia intrafamiliar y de género como un problema para lograr la igualdad y la no discriminación. Producto del profundo análisis se aprueba y divulga la Ley de Maternidad Gratuita y Atención a la Infancia (Congreso Nacional, 2006) y la conformación del Consejo Nacional de las Mujeres CONAMU, como organismo máximo adscripto a la Vicepresidencia de la República. El hecho de contar con este organismo, permitió la lucha constante en el Congreso Nacional, en la promulgación de nuevas leyes a favor de las mujeres a finales de los años 90, como la Ley de Amparo Laboral de la Mujer (Congreso Nacional, 2000), obligando que existiera al menos el 20% de mujeres en las Cortes Superiores de Justicia, Juzgados, Notarías y Registros. (Palacios, 2008)

A partir de los procesos electorales del 2007, en los que se impulsa la reforma de la Constitución del Ecuador, los movimientos de mujeres se activaron para plantear un conjunto de propuestas que no serían objeto de negociación a los derechos ya adquiridos en los años 90. Los derechos por los cuales las mujeres estaban dispuestas a mantenerse en lucha estaban relacionados con:

- Derecho a la libertad de conciencia y a adoptar decisiones.
- Derecho a la igualdad real o material en la aplicación de medidas de acción positiva.
- Derecho a tomar decisiones libres y responsables sobre su cuerpo, vida sexual y reproducción.
- Derecho a la paridad, en la representación de mujeres y hombres en las funciones del Estado, organismos de control, régimen autónomo, gobiernos seccionales, cargos públicos y de elección popular.
- Derecho a la justicia a víctimas de abuso sexual y violencia de género.
- Erradicación del sexismo, machismo, androcentrismo y prácticas discriminatorias.
- Prohibición a los hombres, quienes adeuden pensiones alimenticias o sean responsables de violencia sexuales o de género.
- Conciliación a la labor productiva con la reproductiva (Reimberto, 2008).

Los logros alcanzados por las mujeres en la Constitución Política del Ecuador del 2008, están relacionados a los principios de democracia, igualdad, no-discriminación, respeto a la diversidad, estado laico, pluriculturalidad, ejercicio y exigibilidad pleno de los derechos sexuales y reproductivos, establecidos en los Capítulos primero, segundo, quinto, sexto y octavo del Título II

sobre derechos constitucionales; economía soberana y solidaria, justicia de género, expresados en el Título III, sobre garantías constitucionales; y paridad, participación en el poder público y ciudadano e institucionalidad para la igualdad de mujeres, declarados en el Título IV sobre participación y organización del poder (Tribunal Constitucional del Ecuador, 2008).

Lo anterior expuesto es reflejado en la Ley Orgánica de Educación Superior ecuatoriana (Consejo de Educación Superior, 2018), dentro de los principios hace referencia a la igualdad de oportunidades expresados en el Art.12, y a su vez en el Art. 71 garantiza a todos los actores del sistema de educación superior iguales oportunidades (...) sin discriminación de género, credo, orientación sexual, etnia, cultura, preferencia política, condición socioeconómica o discapacidad.

Institucionalmente, la ULEAM, reorienta su estatuto y establece en el Art. 4, de los Objetivos y Estrategias Institucionales “*Garantizar la accesibilidad a la educación superior, sin discriminación a través de un proceso transparente e igualitario de admisión y nivelación tomando en consideración aptitudes y conocimientos del aspirante, de conformidad con las regulaciones de la Secretaría Nacional de Ciencia y Tecnología (SENESCYT)*” (Herdoiza, 2015).

Respecto al Art. 7 de la misma normativa en su Principio de Cogobierno: *El cogobierno es parte circunstancial de la autonomía universitaria responsable. Consiste en la dirección compartida por pares de los diferentes sectores de la comunidad de la institución, profesores/as estudiantes, empleados y trabajadores acorde con los principios de calidad, igualdad de oportunidades alternabilidad y equidad de género.* Además, en el Art. 10 se garantiza la participación de docentes, trabajadores y estudiantes en la conformación de los organismos colegiados, respetando la paridad de género, igualdad de oportunidades y sin discriminación alguna. Estatuto ULEAM (2014).

## *2.2. La representatividad en espacios de cogobierno en instituciones de Educación Superior.*

El término representatividad subyace en los movimientos feministas durante los años 70 por la participación de las mujeres en el ámbito público (Luna, 1998). El presente estudio analiza la representatividad de las mujeres docentes en las funciones directivas en espacios de tomas de decisiones, como avance de la participación de las mujeres en espacios en el ámbito público en el sistema de Educación Superior.

Durante siglos las mujeres han luchado por visibilizar sus capacidades y profesionalismo en el desempeño de las funciones que realizan, en especial en cargos directivos en las universidades; y éste, ha sido uno de los retos más grandes contra el sistema patriarcal (Luna, 1998); en efecto, ha existido un aumento notable de participación de las mujeres, a nivel de Europa, y América Latina. (Zabludovsky, 2007). En el caso de Ecuador, la participación ha ido creciendo paulatinamente al cumplimiento de las políticas públicas en todas las instituciones que deben elegir a sus autoridades de manera democrática, respetando el principio de igualdad de género y paridad en la conformación de partidos electorales; sin embargo en las universidades, se evidencia un fenómeno, que desde la aprobación de la Constitución ecuatoriana actual, las listas de elección de autoridades universitarias están conformadas por hombres y mujeres, pero la figura de autoridad máxima en la mayor parte de los casos es asumida por un hombre (Observación personal). Se evidencia la falta de igualdad de oportunidades a mujeres y una modesta tendencia a la paridad reflejado en la representación femenina en carreras dedicadas a la educación y a los cuidados (Matarranz & Ramírez, 2018). En el caso de Ecuador, la representatividad en las instituciones de Educación Superior está establecida en la Ley Orgánica de Educación Superior (2010), lo cual debe cumplir con el análisis de los perfiles académicos, científicos y experienciales, para asumir funciones de rectoría, vicerrectoría, decanatos, direcciones departamentales administrativas y académicas, en cuyas elecciones y designaciones, bajo el principio de igualdad de género y paridad, se debe garantizar la igualdad de oportunidades.

### 3. Metodología

#### 3.1. Diseño

El método utilizado en esta investigación se basa en una metodología transversal cuantitativa de corte descriptivo y comparativo.

#### 3.2. Objetivo

Analizar la representación de las docentes en los órganos de cogobierno, direcciones, decanatos y coordinaciones académicas de la Universidad Laica Eloy Alfaro de Manabí (ULEAM).

#### 3.3. Participantes

La muestra estuvo formada por 341 mujeres docentes de la Universidad Laica Eloy Alfaro de Manabí (ULEAM), pertenecientes a 19 titulaciones de las distintas facultades integradas en esta universidad. En la tabla siguiente (Tabla 1) podemos observar que el mayor número de mujeres docentes se encuentran en la titulación de Ciencias médicas (20.5%), seguido de la titulación de Ciencias de la Educación con un 10%. Sin embargo, las titulaciones en las que se encuentra una menor presencia de mujeres docentes son, la titulación de Ciencias Informáticas (1.2) seguida de la titulación de Arquitectura con un 1.5% e Ingeniería Industrial con un 1.8%. La información ha sido extraída del Sistema Integrado de Talento Humano de la ULEAM.

Tabla 1.  
Distribución de la muestra por titulaciones

Titulaciones	f	%
Arquitectura	5	1.5
Ciencias Administrativas	27	7.9
Ciencias Agropecuarias	15	4.4
Ciencias de la Comunicación	17	5
Ciencias de la Educación	34	10
Ciencias del Mar	8	2.3
Ciencias Económicas	19	5.6
Ciencias Informáticas	4	1.2
Ciencias Médicas	70	20,5
Contabilidad y Auditoria	12	3.5
Derecho	8	2.3
Enfermería	17	5
Gestión, Desarrollo y Secretariado Ejecutivo	23	6.7
Hotelería y Turismo	18	5.3
Ingeniería	11	3.2
Ingeniería Industrial	6	1.8
Odontología	15	4.4
Psicología	15	4.4
Trabajo Social	17	5
Total	341	100

#### 3.4. Procedimiento

Se analizó la representación de las docentes en la toma de decisiones y organización institucional durante el periodo del 2017-2018 en la Universidad Laica Eloy Alfaro de Manabí (ULEAM), Consejo Universitario, Decanatos, Direcciones Departamentales, Coordinaciones de

carrera y Representantes de Docentes al Consejo Universitario. El análisis se realizó a partir de los datos disponibles en el Sistema Integrado de Información de Talento Humano de la ULEAM. Se realizaron análisis descriptivos y comparativos para conocer el nivel de representación de las mujeres docentes en cada titulación durante el periodo 2017-2018 en la Universidad Laica Eloy Alfaro de Manabí (ULEAM).

#### 4. Resultados

Según la muestra tomada del Sistema Integrado de Información de Talento Humano, 341 mujeres laboran en 19 titulaciones desarrollando diferentes funciones, docencia, investigación, vinculación, actividades administrativas y representativas según su nominación. El siguiente estudio muestra los resultados de las mujeres docentes que realizan funciones representativas en espacios donde toman decisiones que atañen al cumplimiento de la política pública y a los derechos de quienes laboran en esta entidad de Educación Superior. A continuación, se presenta la distribución estadística de las docentes por titulación y la representatividad en diferentes funciones que serán descritos a continuación: El Consejo Universitario (CU) es el principal órgano y autoridad máxima que rige la ULEAM y está formado por los Vicerrectores/as (V), Decanos/as (D) y Representantes Docentes (RD) sumando un total de 45 participantes, de los cuales 12 son mujeres docentes lo cual representa el 26,6%, en este espacio. Esto equivale a 3,5% de Representatividad de Mujeres Docentes (RMD) en relación con la muestra de nuestro estudio (Tabla 2).

Tabla 2.

Representación de Mujeres Docentes (RMD) en el Consejo Universitario (CU)

Titulaciones	V	D	RD	RMD %
Arquitectura	0	0	0	0
Ciencias Administrativas	0	0	1	3.7
Ciencias Agropecuarias	0	0	0	0
Ciencias de La Comunicación	0	0	0	0
Ciencias de La Educación	1	2	1	11.8
Ciencias del Mar	0	0	0	0
Ciencias Económicas	1	0	1	10.5
Ciencias Informáticas	0	1	0	25
Ciencias Médicas	0	0	0	0
Contabilidad y Auditoria	0	0	0	0
Derecho	0	0	0	0
Enfermería	0	1	0	5.9
Gestión, Desarrollo y Secretariado Ejecutivo	0	1	0	4.4
Hotelería y Turismo	0	0	0	0
Ingeniería	0	0	0	0
Ingeniería Industrial	0	0	0	0
Odontología	0	0	0	0
Psicología	0	1	1	13.3
Trabajo Social	0	0	0	0
Total	2	6	4	3.5

La categoría de Consejos y Comisiones Permanentes no se consideró en el análisis estadístico debido a la existencia de una doble función al ser también integrantes del Consejo Universitario.

La ULEAM tiene en su organigrama institucional un total de 10 Departamentos Centrales de Coordinación Académica y Administrativa: Planeamiento Académico, Investigaciones, Promoción y Desarrollo Cultural, Evaluación Interna, Información Bibliográfica y Servicios Educativos, Bienestar Estudiantil, Técnico, Vinculación con la Colectividad, de Relación y Cooperación Internacionales y de Edición y Publicaciones, Gestión Ambiental, y Seguridad y Riesgos. La representatividad de mujeres docentes es de 50% en relación al número de departamentos que existen en la institución. De acuerdo a este resultado, la representatividad respecto a la población de mujeres docentes es del 1.5% (Tabla 3).

Tabla 3.  
Representación de Mujeres Docentes (RMD) en Direcciones Departamentales (DD)

<b>Titulaciones</b>	<b>DD</b>	<b>f</b>	<b>RMD %</b>
Arquitectura	0	0	0
Ciencias Administrativas	1	1	3.7
Ciencias Agropecuarias	1	0	6.6
Ciencias de la Comunicación	0	0	0
Ciencias de la Educación	0	0	0
Ciencias del Mar	0	0	0
Ciencias Económicas	0	0	0
Ciencias Informáticas	0	0	0
Ciencias Médicas	0	0	0
Contabilidad y Auditoria	1	1	8.3
Derecho	0	0	0
Enfermería	0	0	0
Gestión, Desarrollo y Secretariado Ejecutivo	1	1	4.3
Hotelería y Turismo	1	1	5.5
Ingeniería	0	0	0
Ingeniería Industrial	0	0	0
Odontología	0	0	0
Psicología	0	0	0
Trabajo Social	0	0	0
Total	5	5	1.5

La institución cuenta con 19 titulaciones, asumidos por decanatos, de los cuales existen 8 mujeres asumiendo esta responsabilidad, lo que representa el 42% del total de decanatos; 13 mujeres coordinadoras de 19 titulaciones, que equivale al 68%. Desde el punto de la representatividad institucional corresponde al 6.2% (Tabla 4).

Tabla 4.

Representación de mujeres en Decanatos (D) y Coordinaciones Académicas (CA).

Titulaciones	D	CA	RMD%
Arquitectura	0	0	0
Ciencias Administrativas	0	0	0
Ciencias Agropecuarias	1	1	13.3
Ciencias de La Comunicación	0	1	5.9
Ciencias de La Educación	2	2	11.8
Ciencias del Mar	0	0	0
Ciencias Económicas	0	1	5.3
Ciencias Informáticas	1	0	25
Ciencias Médicas	0	2	2.9
Contabilidad y Auditoria	0	0	0
Derecho	0	1	12.5
Enfermería	1	1	11.8
Gestión, Desarrollo y Secretariado Ejecutivo	1	2	13
Hotelería y Turismo	0	0	0
Ingeniería	0	0	0
Ingeniería Industrial	0	0	0
Odontología	0	1	6.7
Psicología	1	1	13.3
Trabajo Social	1	0	5.9
Total	8	13	6.2

Los resultados antes expuestos sobre el Cogobierno, Direcciones Departamentales, Decanatos y Coordinaciones indican que 32 mujeres docentes participan de las diferentes funciones, lo que en representatividad de mujeres docentes alcanza el 9.3% de la muestra poblacional de mujeres docentes (341) que laboran en la ULEAM.

## 5. Discusión

La Universidad Laica Eloy Alfaro de Manabí (ULEAM), regula la normativa de acuerdo a los cambios establecidos en la Constitución de la República del Ecuador (Tribunal Constitucional del Ecuador, 2008), en la que se prioriza diferentes enfoques y principios, entre ellos la igualdad de género, derechos a la educación, de participación (...); esto respondiendo a su vez a las exigencias nacionales que vayan de acuerdo al Plan Nacional para el Buen Vivir (2013-2017) (Consejo Nacional de Planificación, 2013), documento que regula la planificación de todas las instituciones del Estado ecuatoriano. Por esta razón, la ULEAM, desde año 2014 aprueba un nuevo Estatuto acorde a las normativas que impera en el Ecuador.

De acuerdo a lo anterior, el presente estudio analiza la representatividad de las docentes en los órganos de cogobierno, direcciones departamentales, decanatos y coordinaciones académicas de la ULEAM. Los resultados han demostrado que la participación de las mujeres docentes en el Consejo Universitario corresponde a un tercio en esta instancia; dado a lo establecido en la Constitución del Ecuador que orienta la participación bajo los principios de igualdad, un sistema de selección y designación transparente, incluyente, equitativo, pluralista y democrático, que garantice su participación, con criterios de equidad y paridad de género, igualdad de oportunidades

para las personas con discapacidad y participación intergeneracional.(Tribunal Constitucional del Ecuador, 2008), todo esto coherente con lo estipulado en el Estatuto de la ULEAM en el que garantiza la igualdad de género (Consejo Universitario, 2014). Sin embargo, analizando la normativa sobre la estructuración de este órgano, la institución debe garantizar que la selección de los decanatos sea paritaria, debido a que es la rectoría del establecimiento quien selecciona al fiel cumplimiento de perfiles que puedan asumir el cargo. Por otro lado, las representaciones de profesorado deberán garantizar la paridad de género y la igualdad de oportunidades desde las facultades, que son los espacios de elección. Los resultados revelados en este estudio, son similares a investigaciones realizadas en Europa (Peterson, 2017) y algunos países de América Latina, en donde se evidencia que 6.25% se encuentran en cargos directivos o de representatividad (Ordorika, 2015), similar al resultado que muestra la ULEAM en relación a la representatividad de las mujeres docentes en espacios de toma de decisiones de acuerdo población total de docentes que es 9.3%, por lo que se puede determinar que es bajo.

La ULEAM tiene en su organigrama institucional un total de 10 Departamentos Centrales de Coordinación Académica y Administrativa, la representatividad de mujeres docentes es de 50% en relación al número de departamentos que existen en la institución. Desde la primicia de la paridad, se puede determinar que se cumple con lo establecido en la normativa institucional; sin embargo, estos espacios de acuerdo a este resultado, la representatividad de acuerdo a la población de mujeres docentes es del 1.21% se considera baja, sin embargo de acuerdo al número de departamentos que existen en la institución no lo es, por lo que se podría ver como un avance en temas de igualdad; cabe recalcar que estos departamentos únicamente toman decisiones respecto a las resoluciones que el Consejo Universitario, lo cual comprueba una vez que el CU es el organismo donde debe primar un espacio paritario de participación de mujeres en las tomas de decisiones, lo cual es un gran hallazgo de este estudio.

La institución cuenta con 19 titulaciones, representados por decanatos, de los cuales el 42% son mujeres; estos datos son ligeramente más altos respecto al estudio sobre las mujeres en México: trabajo, Educación Superior y esferas de poder, en el que evidencia que las mujeres representan el 35,5% de trabajo y representatividad en espacios de poder en países de América Latina (Zabludovsky, 2007). Las titulaciones donde la mayoría de las decanas se encuentran como representantes, son aquellas *feminizadas* (Navarro, Ramos, & Cejas, 2018), como Educación, Enfermería, Trabajo Social, Psicología, Gestión, Desarrollo y Secretariado Ejecutivo; a excepción de Ciencias Informáticas. Es importante mencionar que la revisión del Sistema de Información de Talento Humano muestra la existencia de mujeres con perfiles que podrían permitirles asumir decanatos en las Facultades de Ciencias duras y experimentales; esto es un hallazgo importante, debido a que es necesario estimar qué condiciones existen a nivel institucional para elegir a mujeres que representen estas áreas; un estudio similar sobre Mujeres y Ciencia: Modelos de Participación explica que es de muy poco prestigio para las instituciones de Educación Superior que las mujeres puedan asumir la dirección de esas áreas (Ruzzeddu, 2019), lo cual odría convertirse en un estereotipo de quien está a cargo de la rectoría de las instituciones en pensar que una mujer no es capaz de asumir un decanato en áreas de las ciencias duras y experimentales, estos datos son parecidos al estudio realizado por Matarranz & Ramírez, (2018). En relación a las coordinaciones académicas que se encuentran en cada facultad bajo el organigrama del decanato, el 68% están representadas por docentes mujeres. Desde el contexto de la representatividad institucional corresponde al 6.2%, que es el punto más alto en relación con el cogobierno y direcciones departamentales.

A modo de conclusión de esta investigación se determina que a nivel global en la ULEAM la representatividad de la mujer es del 9.3%, lo cual sigue siendo un bajo porcentaje, sin embargo existen paridades en representaciones departamentales donde se toman decisiones en función de procesos administrativos y de resoluciones del Consejo Universitario lo cual podría no ser significativo para la institución, también una aparente paridad en la representaciones de decanatos

y las coordinaciones académicas. Es recomendable que para posteriores estudios se indague sobre los factores que impidan la aplicación efectiva de la política pública e interna de la institución respecto a las elecciones de representantes en función del principio de igualdad.

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Afortunadamente, la sociedad se está desarrollando hacia una diversidad lingüística que abre múltiples posibilidades y enriquece la cultura, la pluralidad y la prosperidad intelectual. Pero también, favorece otros aspectos más cotidianos como el intercambio de información o las relaciones sociales en sus diferentes ámbitos académico, laboral o personal. De esta forma, una sociedad que no sea bilingüe queda en una desventaja intelectual, cultural y social que empobrece la mentalidad de sus ciudadanos. Así, en los últimos años unas de las grandes preocupaciones del sistema educativo en nuestro país ha sido la inmersión al bilingüismo. Y con este esbozo de la realidad social y actual, este libro “*La Educación Bilingüe desde una visión integrada e integradora*” pretende indagar en los éxitos y fracasos que se vienen cometiendo en este proceso de inmersión; así, como analizar los elementos que pueden favorecer el impulso de nuevas estrategias que apoyen a futuros programas destinados a conseguir el avance en la sumersión de una segunda lengua desde una senda sólida y eficiente. Además, las coordinadoras adoptan, dadas las características de nuestra sociedad plural, una perspectiva integrada e integradora que hace especialmente interesante y útil las páginas contenidas en este libro.

De esta forma, se han recopilado, de manera excelente, un amplio número de investigaciones organizadas en tres grandes bloques, de diferentes etapas educativas y distintas zonas geográficas del mundo. Dichas investigaciones, escritas por profesionales de diferentes disciplinas, dan claridad y evidencia a este proceso de inmersión que se lleva desarrollando desde hace un par de décadas. El primero de los bloques “*Enseñanza y aprendizaje: métodos y recursos*” lo conforman ocho capítulos con objetivos muy distintos, pero con resultados muy inspiradores. Los capítulos 2, 4 y 8 analizan y reflexionan, con datos basados en publicaciones científicas, diferentes aspectos relacionados con el bilingüismo como la interculturalidad y la educación física, los factores de éxito y fracaso en la sumersión de una segunda lengua en nuestro país o el alumnado con dislexia y las diferentes estrategias para trabajar la segunda lengua con este colectivo respectivamente. En general, aportan una buena dosis de realidad y crítica que merece ser leída. El capítulo 3 plantea un recurso muy interesante como son los minivideos docentes que, de manera atractiva y eficaz, permite potenciar el bilingüismo en las escuelas. Mientras, los capítulos 5 y 6 aportan información trascendente en el proceso de evaluación; en el primero se cuenta la experiencia de la rúbrica elaborada a través de la guía docente y los excelentes resultados que genera en el alumnado y profesorado; y en el segundo se utiliza una revisión histórica para analizar el proceso de evaluación, donde se resalta en sus conclusiones las ventajas de la evaluación formativa. Finalmente, los capítulos 1 y 7 de corte más investigador muestran la influencia del género y las actividades extraescolares como variables que favorecen la percepción de una buena competencia lingüística (capítulo 1); y la descripción de dos fenómenos que la investigación ha demostrado como claves en el rendimiento académico de los escolares y que pueden tener una enorme influencia en los estudiantes de una segunda lengua, como son el *burnout* y el *engagement* (capítulo 7). A través de este último estudio de carácter longitudinal, los autores alientan de la importancia de las variables psicológicas y de las intervenciones dirigidas a promover la autoeficacia y el compromiso.

El segundo bloque, “*Educación Intercultural*” está formado por 6 capítulos que permite al lector de estas páginas, no solo conocer aspectos educativos relacionados con diferentes regiones del

mundo sino, críticas y reflexiones de nuestro propio currículo. Así, en los capítulos 10 y 13 analizan aspectos culturales, históricos e incluso políticos que han influido y continúan influyendo en Perú y Lituania respectivamente. En el primero se aboga por el diálogo intercultural como instrumento que acerca a comprender y respetar la diversidad cultural y en el segundo preguntan a estudiantes sobre el ruso como lengua franca en Lituania y las posibles connotaciones recibidas de la Unión Soviética. En el capítulo 11 describen un estudio muy interesante sobre los mensajes de Twitter para comprobar el uso del inglés en Venezuela y República Dominicana, en este mismo capítulo añaden la región de Andalucía en el análisis final y las temáticas más recurridas de estos mensajes. En los capítulos 9 y 14 se analizan los contenidos de nuestro propio currículo. En el 9 se alienta por la creación de una competencia intercultural y la distingue de otras competencias que ya están incluidas en el currículo; mientras en el 14 media por enseñar la educación sefardí en España. Por último, en el capítulo 13 de este bloque se describe la experiencia tan positiva en la enseñanza de dos idiomas en Traducción e Interpretación.

Finalmente, el bloque 3 permite cerrar esta recopilación de estudios con cinco trabajos sobre “*Implantación de programas bilingües*”. En el capítulo 15 y 17 se analizan el enfoque AICLE, en el primero desde la importancia de la formación inicial del profesorado y donde se describe una serie de competencias que se requieren en cualquier docente para disponer y manejar en contextos bilingües; y en el segundo se analiza el impacto y los resultados de programas bilingües usando el enfoque AICLE en distintas regiones del mundo. Los capítulos 16 y 18, son trabajos provenientes de Sudamérica, en el primero evalúan los resultados del Programa Panamá Bilingüe a través de entrevista a los docentes; mientras en el segundo se analiza la variable motivacional en el estudio del inglés en Ecuador. Finalmente, en el capítulo 19 se integra el uso de las TIC y la enseñanza de la lengua inglesa con el modelo TPACK y dota a los lectores del capítulo de una serie de recursos atractivos y útiles para la enseñanza del inglés con la tecnología móvil.

En suma, el libro abre una puerta al lector a conocer los aciertos y desaciertos que se llevan fraguando en la inmersión al bilingüismo, al mismo tiempo que permite conocer otros contextos educativos como el de Ecuador, Panamá o Lituania, entre otros, y que enriquece el saber en esta temática. Además, muestran variables como la motivación, el engagement o la elección libre en el estudio de la segunda lengua que favorece el aprendizaje de esta competencia y que merecen ser tenidos en cuenta en futuros programas. Asimismo, dota de estrategias y recursos para que el docente pueda utilizar en las aulas y de esta forma ayudar en la complicada enseñanza del bilingüismo en nuestro país. En definitiva, las páginas de este libro pueden inspirar a docentes, futuros docentes e investigadores a pensar, reflexionar y construir nuevas fórmulas y métodos que contribuyan a la inmersión del bilingüismo en nuestro contexto más cercano.

[Daniel Falla Fernández]