Investigación e innovación en la Enseñanza Superior

Nuevos contextos, nuevas ideas
Investigación e innovación en la Enseñanza Superior. Nuevos contextos, nuevas ideas
21. Teaching research of the implementation of High Academic Performance groups

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ABSTRACT

To promote teaching in English, the Valencian government, in collaboration with public universities, created the High Academic Performance (Alto Rendimiento Académico; ARA) groups in the academic year 2010/2011. This program aims to enhance the performance of outstanding students via small groups and teaching in English since the beginning of their university studies. The main objective of the present study is to evaluate the opinions of both students and professors, as well as their English level and the degree of publicity regarding the availability of ARA groups. To do so, we considered respondents related and unrelated to these ARA groups, and conducted surveys at the Faculty of Sciences of the University of Alicante, which has an ARA group in the Biology degree. Respondents unrelated to these groups showed a considerable lack of knowledge about them, although Biology students are getting more aware (+20%) of them. All students and professors agree in the importance of teaching in English and over 65% think that there is an advantage of teaching in small groups. However, despite the satisfaction level of students in the ARA group is high (average of 8.3 out of 10), they do not think this high performance groups enhance their chance to get a job, which contradicts the views of 60% of their professors in this regard. As expected, the English level is higher in ARA groups compared to non-ARA groups, but the level is increasing in both cases. It is still necessary to work on improving the dissemination of ARA groups so students are aware of their existence and can take advantage of their benefits.

KEY WORDS: English, high academic performance, ARA group, teaching research, surveys.

1. INTRODUCTION

Research about learning and teaching processes in higher education is steadily increasing both in quality and quantity (Altbach, 2002). There are currently contextual reasons that substantially increase its relevance. The Bologna process, in which the countries of the European Union are involved, has established internationalization as a priority in university education, turning language teaching into a necessity. Multilingualism is a valuable resource in a globalized world which enables us to communicate. English has become the global language, developing a special role in many academic areas, including science (Crystal, 2003). To promote teaching in English, the Conselleria d’Educació, Cultura i Esport of the Generalitat Valenciana, in collaboration with public universities, created the High Academic Performance (Alto Rendimiento Académico; hereafter ARA) groups in the academic year 2010/2011.

ARA groups are meant to increase students’ performance by reducing the number of students and by implementing lectures in English. The objectives of teaching and learning languages have not
changed much through time; however, the scenario in which teaching and discourse takes place is subject to changes, related to sociolinguistic, sociological and pedagogical aspects (Sánchez, 2009). Several institutions of the European Union are adapting their higher education systems through these groups to improve their teaching quality and their academic performance. This is the reason why it is fundamental to study the perception regarding these ARA groups in students and professors, as well as its evolution over time. The original aim of ARA groups was to enhance the performance of outstanding students through small groups and teaching in English since the beginning of their university studies. However, so far the performance of this group in comparison with others, and the suitability of teaching in English and smaller groups as the sole tools to ensure academic success and access to the job market have been rarely addressed. The few studies conducted so far suggest that the grades are slightly higher in the ARA groups in comparison with the classes taught in Spanish (Crespo et al., 2015), and that this difference seems to grow with time in Biology (Velasco et al., 2012). It has also been shown that not only is there a higher number of passes in these groups, but students are also able to use the English language correctly both orally and in written form (Saval-Calvo et al., 2018). Despite these previous studies, we know little about the level of satisfaction of both students and professors regarding these groups, and also whether or not the enhanced qualifications are sufficient to make a difference in the job market. Finally, and despite the better marks and English ability, there are not many students joining these groups, neither many undergraduate degrees offering them. This could be caused either to a lack of publicity of the existence and performance of these groups, a lack of sufficient English level amongst students and/or professors in non-ARA groups, or a lack of satisfaction regarding these groups.

The main objective of this study is to evaluate the level of satisfaction of both students and professors using surveys obtained in the last three academic years to be able to quantify changes in their perception across time. Through these questionnaires it is possible to know more about their English level, as well as about the opinion of students and professors about ARA groups. Our hypothesis is that this program shows a positive feedback from both professors and students fulfilling the objectives of its implementation.

2. METHODS

2.1. Description of context and participants

The surveys were directed to the professors and students of the different careers of the Science Faculty of the University of Alicante (Marine Sciences, Mathematics and Biology). Questionnaires were performed during the last three academic years, focusing on the views about the only ARA group of this faculty, which belongs to the Biology degree. The survey participants were divided into 5 groups, each one having different questions (see annex):

– Students undertaking a degree without an ARA group: Marine Sciences and Mathematics.
– Students undertaking a degree with an ARA group, but attending another group: Biology.
– Students undertaking a degree with an ARA group, attending this group: Biology.
– Professors teaching an ARA group: Biology.
– Professors not teaching an ARA group: Biology.

2.2. Tools

Virtual surveys were carried out using Google Forms. The survey participants were selected from the previous 5 mentioned groups and their dissemination was made through email and WhatsApp to
students and professors of the University of Alicante. The surveys were conducted from February to April each year, with the participation of 133 respondents. The latter ensures an average number of respondents per groups higher than 25 people, and therefore representative enough to be able to analyze the responses of the surveys collected using Microsoft Excel.

3. RESULTS
We found an increasing trend through time (up to 20% last year) of the degree of awareness regarding the ARA groups for students in the Non-ARA Biology group. In Marine Sciences values have remained similar during the three years, but in Mathematics it has decreased by 30% since last year (Figure 1).

Figure 1. Survey of the degree of awareness of the ARA group in all.
Regarding the level of satisfaction of the students from the ARA group in Biology, the average value is 8.3, being the value 7 the one with the highest percentage of answers (37.5%). This level has increased since last year, although the number of respondents has halved this course 2018/2019. In general, most of them are quite satisfied with the ARA group classes (Figure 2).

As for the evaluation of the importance of teaching in English in science degrees, the degree of Marine Sciences stands out every year of this study with an average of 9, while in the case of Mathematics the value this year has increased from 5 to 6. In the case of the Biology degree, the values of the respondents are similar, maintaining a maximum average value of 8 (Figure 3). In general, students of all grades acknowledge the importance of teaching in English and they think that all science degrees need a group where lessons are taught in English.

![Figure 2. Survey on the level of satisfaction of the 30 students from the Biology ARA group.](image)

![Figure 3. Survey on the Importance of English in Science Degrees.](image)

To assess the different levels of English in the different degrees surveyed in the Faculty of Sciences this present academic year, 116 students and 17 professors were surveyed on language skills. In the
case of the Marine Sciences degree and the ARA group of Biology, the highest levels were similar in comparison to previous years. With 16 students surveyed, the highest percentage of accreditation is B2 (62.5%), while a 25% had a C1 and a 12.5% had a C2, being the main reason that the prerequisite to enter is a B1 level (Figure 4.D). In Marine Sciences, with 29 respondents, the B1 (45.1%) and B2 (34.3%) levels are the most extended (Figure 4.A). In Non-ARA Biology groups, with 43 students surveyed, the level is lower, and the students do not have an English level accreditation in 20.9% of the cases. On the other hand, the levels A2 (30.2%) and B1 (37.2%) stand out with similar percentages (Figure 4.B). Students in Mathematics, with 28 respondents, show diverse percentages with a 25% in A2 and a 28.6% in levels B1 and B2 (Figure 4.C). These students are the group with the lowest percentage of non-accredited respondents after the ARA Biology group (29%).

On the other hand, the 5 professors surveyed from the ARA Biology group have an accredited level C1 in 80% of cases, unlike one respondent who did not present linguistic accreditation (20%). In contrast, the 12 professors who did not participate in teaching an ARA group stand out in level B2 (49.9%). B1 and C1 levels have the same percentage (16.3%). As expected, the level is lower in

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**Figure 4.** Survey on the level of English in the degree of Marine Science (A), Non-ARA Biology (B), Mathematics (C) and ARA Biology (D).
the non-ARA group, but it should be considered that there is a large difference in the number of respondents (Figure 5). Compared to previous years, the level of English has increased in both groups, especially in the ARA group, in which C1 level stands out.

Both groups of professors surveyed believe that there are not disadvantages in teaching in English as in previous years. This happens because the English level of the respondents has improved over the years (Figure 6.A). The professors from the non-ARA group think that one of the major advantages is the reduction of number of students per class, while 33% of ARA group professors do not agree with that assumption, although this percentage is lower compared to previous years (Figure 6.B). Finally, when it comes to getting a job, ARA group professors think that this group facilitates it. In the contrary, in the non-ARA group there are some discrepancies: 41.7% of the respondents think it is favorable, while 58.3% think that the students will not obtain a better job (Figure 6.C).

A)
4. DISCUSSION AND CONCLUSION

The awareness of students on non-ARA Biology groups about the ARA group has increased up to 20% since last year. This is a positive result, which might be related to the fact that there is an ARA group in the Biology degree of the University of Alicante, considering that this is the only degree in which awareness has increased. In the case of Marine Sciences, it has not changed, but in the Mathematics degree it has even decreased by 30%, breaking the positive trend from previous years. Thus, a higher effort should be made to inform about the existence of ARA groups, and implement them in science degrees other than Biology. A possible way to achieve this aim would be by increasing the number of informative talks and more publicity.

The level of satisfaction from students and professors from the ARA Biology group has increased since last year, which reflects a good implementation of this program that offers a series of advantages to students and match the increasingly higher marks registered by these students (Crespo et al. 2015; Velasco et al. 2012). Changes in the degree of awareness and satisfaction detected over the three years we have implemented the survey highlights the context-dependency of these results and the need for longer term studies to be able to quantify the success of teaching in English and in small groups.
English is considered as an important language for all science students, following a positive trend over the years, although the opinion of students in Mathematics remains the lowest. This result contrasts with the low number of students in Mathematics who do not have an accreditation, in comparison with the rest of the degrees. This might be due to the importance of English in the rest of the sciences, in which it has a great prominence. In general, the English level of ARA group students is the highest one, considering the accreditation levels, showing a positive correlation between students from this program and their English level.

As for the Biology professors, the level of accreditation is higher on those from ARA group compared to the non-ARA group professors. It is an expected result, but it is also important to remark the English level increase in both groups since last year, which is a positive progress and suggests that implementing more ARA groups would not be limited by the English level of professors or students. Regarding the opinion of professors about a possible delay caused by using English in class, both groups think that this is not a problem, specially the non-ARA group. This group also thinks that the reduced number of students per class is the major advantage of ARA groups, and it facilitates to get a better job. In the case of the ARA group, 33% of professors do not see that advantage, and up to 42% disagree on the usefulness to get a better job. These differences might reflect some lack of knowledge about what the teaching under this program entails. In addition, opinions about the higher possibility to get a job should be complemented with quantitative surveys on the incorporation of the students from the different groups to the job market.

In summary, it appears that ARA groups satisfies both professors and students. Most of the shortcomings of these groups has been due to the lack of knowledge from external professors and students about what they imply. Therefore, it is very important to explain the existence and aim of this program for students, especially for those who start undergraduate programmes, so they know all the possibilities they have to maximize their opportunities in their professional future. Thus, the continuation of this study in the coming years is recommended to monitor if the degree of awareness about the ARA group increases and how oriented measures to this aim are effective.

5. REFERENCES


6. ANNEX

The questions for each category were:

– Students undertaking a degree without an ARA group:
  1. Did you know about the existence of ARA groups before starting the degree?
  2. Do you know the advantages of studying in an ARA group?
  3. Would you be interested in studying in an ARA group if you had the choice?
  4. Do you think you have the right level of English to join an ARA group?
  5. Do you consider you have the same level of education than ARA groups?
  6. Do you know someone from an ARA group? Do you believe that the bilingual education that person has received gives him/her a better academic training than yours?
  7. Do you agree with the curricular advantages of the ARA group?
  8. Please rate the importance you think English has in your degree. (1 to 10)
  9. Would you say that there are professors capable of teaching in English?
  10. Do you have an English language accreditation? Which one?
  11. Do you think it would be easier for you to find a proper job after being part of an ARA group than if you were part of a Spanish speaking group?
  12. Do you think that more students will attend the ARA group if it would be named in another way?
  13. If your answer is yes, which of the following names would you choose?
     i. The name should indicate that is a reduced group.
     ii. The name should indicate that classes are in English.
     iii. The name should indicate that classes are in English and in a reduced group.
  14. Did you answer this survey last year?
  15. Do you have any suggestions or proposals to make regarding ARA groups?

– Students undertaking a degree with an ARA group, but attending another group:
  1. Did you know about the existence of ARA groups before starting the degree?
  2. Do you know the advantages of studying in an ARA group?
  3. Do you think you have the right level of English to join an ARA group?
  4. Do you consider you have the same level of education than ARA groups?
  5. Please mention the main reasons why you decided not to join the ARA group
  6. Do you have an English language accreditation? Which one?
  7. Please rate the importance you think English has in your degree. (1 to 10)
  8. Would you say that there are professors capable of teaching in English?
  9. Would you study in an ARA group without all the advantages?
 10. Do you think it would be easier for you to find a proper job after being part of an ARA group than if you were part of a Spanish speaking group?
11. Do you think that more students will attend the ARA group if it would be named in another way?
12. If your answer is yes, which of the following names would you choose?
i. The name should indicate that is a reduced group.
ii. The name should indicate that classes are in English.
iii. The name should indicate that classes are in English and in a reduced group.

13. Did you answer this survey last year?
14. Do you have any suggestions or proposals to make regarding ARA groups?

– Students undertaking a degree with an ARA group, attending this group:

1. Do you know the advantages of studying in an ARA group?
2. Would you say that there are professors capable of teaching in English?
3. Do you think that the level of demand of the degree in relation to English is correct? 4. Do you think you have improved your level of English with bilingual education?
5. Which level of English language accreditation do you have?
6. Please rate the importance you think English has in your degree. (1 to 10)
7. Do you think you have a higher level of preparation than the non-ARA groups?
8. Would you say in general that the required level of ARA groups is higher than the non-ARA groups?
9. Have you ever had native professors? If yes, would you like to give more classes with them?
10. Do you consider you have the same level of education than ARA groups?
11. How did you know about the existence of the ARA groups?
12. Has the ARA group fulfilled your expectations?
13. Rate 1 to 10 according to your level of satisfaction with the ARA group.
14. Do you think it would be easier for you to find a proper job after being part of an ARA group than if you were part of a Spanish speaking group?
15. Do you think that more students will attend the ARA group if it would be named in another way?
16. If your answer is yes, which of the following names would you choose? i. The name should indicate that is a reduced group. ii. The name should indicate that classes are in English. iii. The name should indicate that classes are in English and in a reduced group. 17. Did you answer this survey last year? 16. Do you have any suggestions or proposals to make regarding ARA groups?

– Professors teaching an ARA group: Biology.

1. Do you believe that the level of English of the students is in line with what high academic performance demands?
2. Would you say that at some point teaching in English doesn’t confer any benefit to teaching?
3. Do you think students in the ARA groups show a greater predisposition to learning than other groups?
4. Would you say that class attendance in ARA groups is higher than the other groups? 5. Do you consider that, apart from the language, the ARA groups have a higher level of teaching?
6. Would you consider that one of the biggest advantages of the ARA groups is the small number of students per class?
7. Which level of English language accreditation do you have?
8. How many years ago did you obtain your English language accreditation?
9. Do you feel as comfortable giving classes in English as in Spanish?
10. Do you think giving classes in English leads to a delay at some point?
11. Please rate 1 to 10 according to your level of satisfaction with teaching in an ARA group.
12. If you had to choose between teaching an ARA group or a non-ARA group, which one would you choose?
13. Do you think it would be easier for you to find a proper job after being part of an ARA group than if you were part of a Spanish speaking group?
14. Did you answer this survey last year?
15. Do you have any suggestions or proposals to make regarding ARA groups?

Professors not teaching an ARA group:
1. Do you know what the ARA group consists of?
2. Do you know the advantages and benefits of teaching in an ARA group?
3. Would you consider that one of the biggest advantages of ARA groups is the small number of students per class?
4. Which level of English language accreditation do you have?
5. How many years ago did you obtain your English language accreditation?
6. Would you rather teach in ARA or non-ARA groups? Why?
7. Do you think giving classes in English leads to some slow-down at some point?
8. Do you believe it would be appropriate for all degrees to have an ARA group?
9. Do you think it would be easier for you to find a proper job after being part of an ARA group than if you were part of a Spanish speaking group?
10. Did you answer this survey last year?