

Effects of Oral plus Graphic Communication: An Analysis and Application in the Case of a Competitive Youth Football Game

Moez Hamdi, Guinoubi Chamseddine, Sahli Hajer, Nejmeddine Ouerghi, Makram Zghibi*

Higher Institute of Sports and Physical Education (ISSEP) Kef, University of Jendouba, Jendouba, Tunisia

Email: makwiss@yahoo.fr

Received 25 April 2016; accepted 24 July 2016; published 27 July 2016

Copyright © 2016 by authors and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Purpose: the primary objective of this study was to evaluate the response and application of students to “Oral plus Graphic Communication” by monitoring the implementation of the action projects in a competitive football game. **Method:** fourteen (14) students from Dahmani volunteered and participated in the study. The motor and verbal activity of the students were observed and recorded. The study opted for both qualitative and quantitative analysis of the data. The plans and strategies prepared by the students formed the qualitative basis while the quantitative segment was based on the implementation of these schemes. **Results:** the students were successful in implementing the rules of action collectively from the third (3rd) cycle of the fourth (4th) session. Their involvement in the game situations, especially in the last three sessions expresses a notable familiarization with a new semiotic constructivist approach. **Conclusion:** the addition of “Graphic Communication” to “Oral Communication” enabled the students to identify the situation and its challenges, and provided a collective solution to overcome the identified issues, leading to a measurable and favorable outcome.

Keywords

Communication, Rules of Action, Oral and Graphic Communication, Football

1. Introduction

Research makes evident that mere transfer of knowledge from the teacher to students is not sufficient. The students may acquire the new information but there is no evaluation of their understanding of the learning. A process or a system which enables the understanding to be evaluated in a measurable manner would be conclusive of the students understanding.

How to cite this paper: Hamdi, M., Chamseddine, G., Hajer, S., Ouerghi, N., & Zghibi, M. (2016). Effects of Oral plus Graphic Communication: An Analysis and Application in the Case of a Competitive Youth Football Game. *Creative Education*, 7, 1648-1655. <http://dx.doi.org/10.4236/ce.2016.711168>

To analyze and understand the teaching-learning process in physical education and especially in team sports, the semio-constructivist approach seems to be an efficient framework (Gréhaigne, 1999; Wallian & Chang, 2007a). Researchers are asking how to manifest such a dialogue between thoughts and action (Wallian & Chang, 2007a). In fact, it is not evident that teaching is enough to be sure that pupils really learn. It is also a reflexive practice in and via the action (Gréhaigne et al., 2001; Wallian et al., 2004; Mahut, 2003; Nachon, 2004; Zerrai, 2008; Zghibi et al., 2009; Zghibi, 2010, 2012; Zghibi et al., 2013). The challenge is to make pupils think to be able to construct and implement a collective decision to overcome the situational problems.

In Tunisia, the national education strategy of physical education aims to develop, as a major objective, a new generation of healthy, responsible and independent citizens.

The pedagogic tools and the management of physical education sessions in Tunisia seem to be far removed to achieve such an objective. Feedback from the students is not given any consideration and inter-communications are rarely considered as educational tools (Zghibi, 2012). There is virtually no research on this aspect of education. Nor does there exist any desire to facilitate or encourage a process of feedback or two way communications between the faculty and the students. The entire communication process is archaic, old fashioned and unidirectional. The relation between teacher and pupils is clearly vertical with no scope of entertaining any meaningful and participatory feedback from the students. Therefore, to invest in the verbal exchanges in the classroom is not only to innovate but also to pass from a behaviorist approach in teaching collective sports games to a constructivist (Gréhaigne, 1992) or even a semio-constructivist one (Gréhaigne, 2009; Wallian & Chang, 2007a; Zghibi et al., 2014).

The idea was to involve the students to actively participate in the process with freedom to analyze their predicament, design a plan to overcome the situation and choose the means of implementing their plans. This involvement and implementation would be seen after the students have been exposed to “oral plus graphic” representation. The students as the effected party would be given the liberty to do a situational analysis and come up with the best solutions after discussing the different options amongst themselves.

2. Methodology

The research protocol proposed in the study consisted of managing a football cycle of eight (8) sessions. Each session would be of one hour duration. Fourteen young men were selected from the Dahamani Athletic Club, a juniors level three (3) league with an average of eighteen (18) years. The student selection was designed keeping in mind that at this stage of young adulthood, the students would be capable of conducting an analysis and understand their predicament. They would also be mature enough to recommend remedial steps having an outcome on the game itself. The students at this stage would have the capabilities to independently evaluate the situation and come up solutions as “understand to succeed” (Gréhaigne, 1992).

2.1. Experimental Design

The students were divided in to two teams as equitably as possible to avoid favoring any particular group or students. This was done to eliminate any impact or interference on the outcome of the game. Each team consisted of seven (7) players with the teams fielding five (5) players at a time. The remaining two players would be on the bench and could be substituted as required. The game was played on a handball court measuring 40 × 20 meters. Each session was of ten (10) minutes duration and supervised by the teaching staff. During the break in the game, the teams were separated for review of the game played.

The same football coach / teacher supervised the discussion in both the teams. This was done to eliminate any difference of staff involvement and produce greater credibility in the results as recommended by (Gréhaigne et al., 1998).

In the first break the players were exposed to a verbalization session with duration of five minutes. The players were asked to perform an analysis of the game played so far. The analysis would focus on simple issues like what went well and what were the areas of improvement.

They were encouraged to discuss amongst themselves and agree on the solution on how to improve their game. This was a major shift as traditionally the football coach or teacher would address the issues he had identified and tell the players what each of them is supposed to do. The responsibility for both analysis to identify the issues, and solution to resolve these issues fell squarely on the shoulders of the players. The players are thus transferred greater ownership of the game to improve the individual and collective performance. In terms of dif-

ferentiation for the purpose of the study, Team A was provided the methodology of building its action plan by restricting it to oral discussions. Team B was however encouraged to use both Oral and Graphic Communication techniques for their analysis and feedback. Both teams were told to come up with action plans which they would be able to implement in the next session of the game.

The analysis will focus on team B progress and action projects during the cycle. **Figure 1** shows the steps followed in this study.

2.2. Data Collection and Analysis

The data collection and analysis of the study were done using both qualitative and quantitative measures.

The “Qualitative” analysis was purely descriptive. While this approach is useful in understanding the situation, it lacks the ability of measuring specific and objective goals which may have been listed. This would be similar to what **Roulet (1987)** had mentioned as “models inspired from language sciences”. The “Quantitative” analysis offers the advantage of being measurable. It facilitates and helps in the evaluation of the goals whether they have been achieved or not.

Related to our game of football, we would evaluate if the strategies agreed in breaks are implemented in the next cycle of the game or not. In order to evaluate the implementation of the Action Plan of Team B we used an observation grid developed by **Gréhaigne, Billiards and Laroche (1999)**. The grid gives a detailed scoring for each parameter so the judgment is more objective.

The tool thus developed focused on five parameters: game volume (total number of played balls), defensive skills (intercepted balls from the opponent), adaptation to the game (number of lost balls), offensive players’ abilities (number of shots on target) and effectiveness index (the goals’ number).

3. Results

Qualitative analysis: identification of team B action rules

The results highlight the production and extraction of action projects from the communication sequences. The aim is firstly to describe what actually happened during the discussion and secondly to identify the action project during each session.

Session 1

Team B verbatim

Anis: -“our formation is absolutely horrible”.

Mohamed: -“we need to intercept the ball before they cross their area”.

Marwen: -“we must use two permanent defenders, Amer and Anis”.

Amer: -“especially the short passes”!

Mohamed: -“we have to play the counterattack”.

Jalal: -“we must mark the player having the ball”.

Mohamed: -“they will attack, so we must counterattack”.

Marwen: -“you must make a substitution: send a faster player in”!

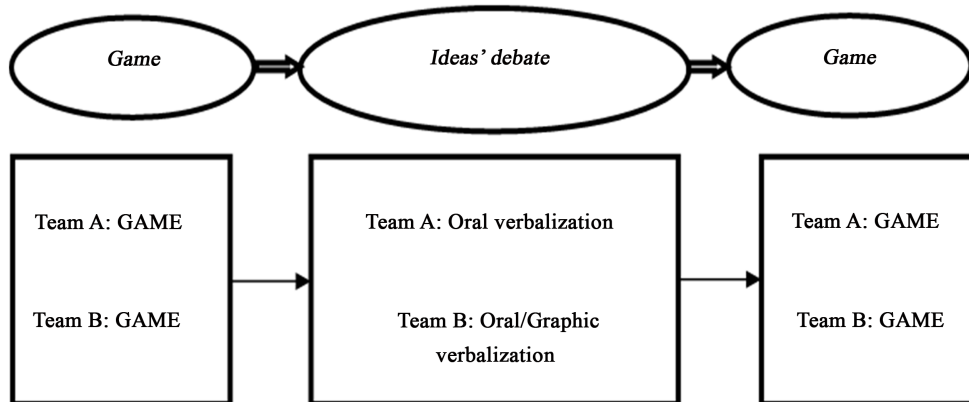


Figure 1. Global structure of learning situation using verbalization.

The study of the team B speech reveals that the discussion is based more on proposals. We remark in relation to the implemented proposals an intention to give orders. This propositional content highlights action rules that emphasize the ball interception and the counterattack.

In this schema, the pupils presented a formation with a precise position for each player. Marwen became the goalkeeper. Amer, a speedy right back, was asked to use his speed to ensure the numerical superiority in the offensive phase. Anis the left back, was assigned the responsibility to provide coverage in the defensive zone. Mohamed would remain as a striker, while Jalal's major assignment would be to mark Camara, the striker of the other team.

Session 4

Verbatim of the team B

Hamdi: -“the defense is not compact”.

Mohamed: -“we are not organized in the defense.

-strikers are not creating spaces or solutions”.

Hamdi: -“we need a striker”.

Jalal: -“the attack is not effective”.

Anis: -“there is no play maker”.

Amer: -“I suggest a permanent defender, Anis”.

In this session, the focus of the students can be seen moving from analysis to analysis plus recommendations. They came up with specific recommendations to make changes in their game plan for further improving their capabilities.

These action plans were based on the fact that Team B was outplayed by their opponents in the first session. This loss of the first session was not acceptable to Team B who embarked on a serious situational analysis of the cause of the loss. They then looked at the resources available, themselves; and decided on how best to utilize the talents of each player. Instead of traditional roles for each player in their constant position, the students came up with a creative solution better utilizing their talents. The use of one permanent defender and assigning the other defender to defense plus offensive roles is an example of their creative solution.

Session 8

Verbatim of the team B

Amer: -“we must return to our previous tactics”.

Jalal: -“we need more efficiency in attack”.

Amer: -“you have to play short passes”.

Hamdi: -“counterattack”.

Mohamed: -“we must mark the opponents”.

Amer: -“we have to be more compact defensively and play the counterattack”.

Hamdi: -“we were not in the right positions during the free kicks”.

Amer: -“we must be quick and effective in attack”.

In this session we see an increase in the number of solutions and recommendations coming from the students themselves. The lack of scoring was identified and the focus was shifted to playing a more offensive game. This was not just a qualitative shift in their thinking but it was accompanied by specific and measurable recommendations. These objectives were achievable as they involved using the same players with adjustments in their roles.

The involvement of the defense in not only stopping the opponents advance but then rapidly turning the situation into one of counter attack is an example of their specific and measurable objective. This went with their new tactical formation that shows a tendency to return back in score through rapid and effective attacks. The new formation is mainly offensive using the midfielders to reinforce the attack line.

Quantitative analysis: Verification of the pupils' action rules realization

This quantitative section aims to verify the implementation of the action projects developed by the players. We detect the eventual quantitative progress in the various indicators of the game (Zerai, 2008).

First, we present the action projects of the eight sessions to assess whether the pupils were able to validate their action projects (Table 1).

It can be seen that from the fourth (4) session, the students began to achieve the objectives agreed in earlier discussion sessions. We try to confirm that a progress is seen over the sessions of the cycle. It's a consolidation index more than a finding.

Table 1. Evolution of played, intercepted, lost balls, shots and scored goal numbers before and after verbalization during eight sessions.

Variables	Played balls		Intercepted		Lost balls		Shots		goals		
	sessions	Before	After	Before	After	Before	After	Before	After	Before	After
S1		21	17	18	09	08	11	10	05	02	02
S2		13	15	14	17	07	05	09	12	02	02
S3		13	22	17	12	08	06	11	04	03	04
S4		18	21	09	21	08	08	04	12	00	03
S5		18	19	12	08	11	11	08	07	00	00
S6		23	26	18	16	07	09	07	12	00	02
S7		20	24	12	20	16	09	12	15	00	02
S8		26	31	13	21	14	17	07	16	00	00

Session 1

Based on the number of intercepted balls and the number of shots showed in **Figure 2**, we do not notice any progression between the two game situations (before / after discussion).

The number in **Table 2** of intercepted balls after this sequence of verbalization (09) is fewer than before (18). The number of shots decreased from (10) to (05). Thus, the action project developed during this session was not validated.

Session 4

We can see in **Figure 2** their success in being able to score goals. Team B scored three (3) goals in this session while in the earlier sessions they had failed to score any goals. This is an objective which is measurable and evident and forms a part of the quantitative analysis showing the success of Team B in achieving an objective.

Session 8

The number of shots on target between the two game situations increased notably as shown in **Figure 3**. We note that the numerical values (before/after) verbalization passed from (07) to (16) showing an increase of over 50%. It was noted that while the number of shots on goal increased, this did not result in any goals being scored. Thus their objective of greater attack was achieved but the objective of scoring more goals did not materialize.

4. Discussion

The debate of ideas is a tool of major importance to improve the teaching-learning process (Zghibi et al., 2014). This tool provides an opportunity of communication between an individual and collective decision. Learning with visualization promotes the emergence of action projects and participates in the pupils' cognitive development, especially in the construction of a structured thought (Zghibi et al., 2013).

These results are in relation with the notion of communication contract. In any act of communication, the partners understand and interact, validating what makes sense for them, namely "collective intentions" (Searle, 1991), "the joint intentionality" (Sensevy, 2003), and "negotiation" (Kerbert-Orcchioni, 1984).

The effectiveness of visualization as a teaching tool was shown in many studies (Nachon, 2004; Gréhaigne, 1998, 2009; Delignières, 1992; Wallian et al., 2002, 2006, 2007a, 2007b; Zerai, 2008; Zghibi et al., 2013, 2014). This framework tries to analyze and understand the dialogue between the thoughts and actions (Austin, 1970; Bernicot, 1992).

This case study, despite a small sample, highlights the importance of oral + graphic communication in the football teaching-learning system in Tunisia. It can be a new start to develop trends using new pedagogic tools and promoting the autonomy and independent thinking process of the pupils. This would replace the authoritarian and imposing tendency generally used by the teachers. It's an appeal to challenge and question the didactic pyramid and allow the pupils a new space of exchange and freedom. This would enable the students to really become the acquirers of knowledge.

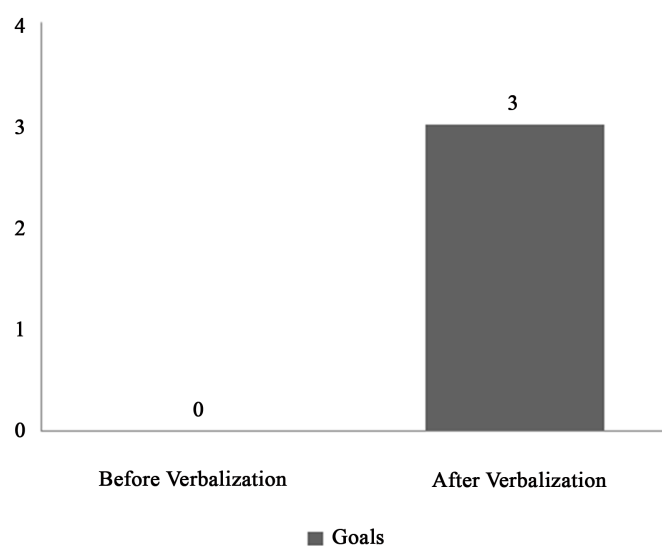


Figure 2. Evolution of goals number before and after verbalization during the fourth session.

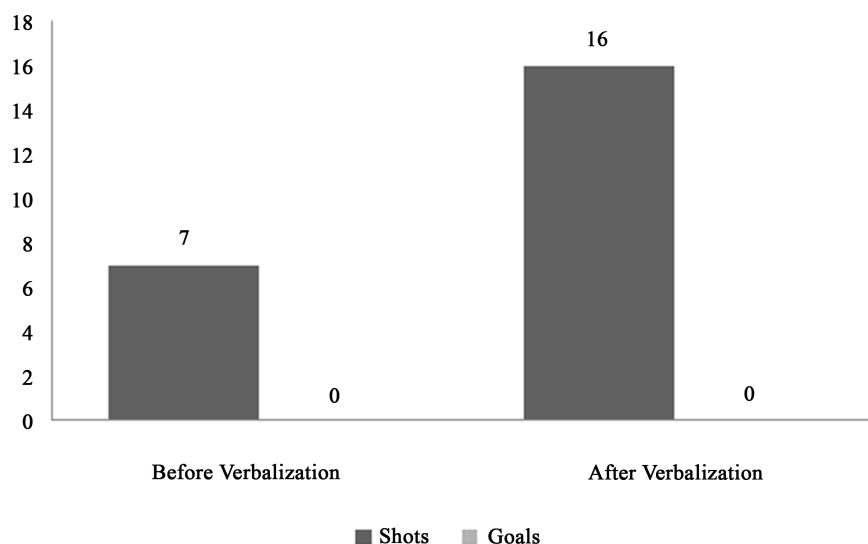


Figure 3. Evolution of shots and goals number before and after verbalization during the eighth session.

Table 2. Evolution of the indicators of the game before and after verbalization during the first session.

Variables	Before verbalization	After verbalization
Intercepted balls	18	09
Shots on target	10	05
Scored goals	02	02

It would be interesting to investigate the efficiency of oral plus graphic tools with a larger sample; with girls, with a mixed team and in other disciplines. The interaction of all these factors may facilitate a clearer framework to introduce this modality progressively in the education system.

Linking of thought and action provides multiple perspectives in research activity concerning the teaching/learning process. Knowledge is first to be able to use what we have learned, to mobilize and overcome the encountered difficulties (Giordan & De Vecchi, 1987). It is this discussion of points of view in a debate that allows the emergence of proposals (action rules) suitable for building knowledge and to form a common decision.

We should notice the division of studies between two main approaches: one focusing on the necessity to put the pupils in situations of ideas' debate (discussion with inter-individual conflict) (Gréhaigne, 1998, 2009; Deriaz et al., 1998; Wallian et al., 2006; Zghibi et al., 2014) and a second framework emphasizing the usefulness of putting pupils in situations of discursive inter-locution (discussion without inter-individual conflict) (Wallian et al., 2004).

5. Conclusion

Initially, the players encountered enormous difficulties to validate their action projects. Through the cycle, pupils were able to make their collective decisions (Chang, 2009). This progress can be explained by the identification of the encountered problems. The meaning of the pupils' speech is seen via the implementation of decisions already taken in communication sequences.

Indeed, the players thought via this visualization about their game experiences, negotiated available solutions and co-construct effective action rules (Gréhaigne, 1999) as collective action projects.

Relationally, pupils began the creation of new relationships with their teammates (Zghibi et al., 2013a). We notice that from the fourth session, a decreased tension in the speech with acceptance of the teammates opinions emerged, instead of the competitive shouting and the yells remarked on the first three sessions. These relationships are based on some agreements that result in an action project (Lave & Wenger, 1990). The debate of ideas is therefore not only a discussion amongst the group to resolve conflict, but it can also improve a climate of understanding that promotes the emergence of effective action rules in the form of common decisions.

An interesting aspect of this study was to see the challenge initially facing the students to move from an individual decision to a collective decision. With the mandate given to them, each student was becoming an expert and thought he had the solution to their challenges. The use of graphic plus oral communication facilitated the process of the students resolving this issue and coming to an agreed solution. This consensus gave a sense of ownership and motivated each student to perform better as it was now the decision of each of them. This created an ownership of the solution uniting the team as one single body. This unity enabled them to implement the decisions with greater ease and motivation.

Acknowledgements

The authors greatly thank all the pupils who participated in the study.

References

- Austin, J. L. (1962). *How to Do Things with Words*. Oxford: University Press.
- Bernicot, J., Caron-Pargue, J., & Trognon, A. (1997). *Conversation, Interaction et fonctionnement cognitif*. Nancy: PUN.
- Chang, C. W. (2009). *Langue, pensée et action: Approche sémio-constructiviste des apprentissages du jeu en Basket-ball chez l'élève de CM2 (5ème grade)*. Thèse de doctorat en science du sport, Université de France-comté.
- Delignières, D. (1992). Apprentissage moteur et verbalisation. *Echanges et Controverses*, 4, 29-42.
- Deriaz, D., Poussin, B., & Gréhaigne, J-F. (1998). Le débat d'idée. *Revue E.P.S.*, 273, 80-82.
- Giordan, A., & De Vecchi, G. (1987). *Les origines du savoir. Des conceptions des apprenants aux concepts scientifiques*. Neuchâtel: Delachaux & Niestlé.
- Gréhaigne, J. F., & Godbout, P. (1998). Observation, Critical Thinking and Transformation: Three Key Elements for a Constructivist Perspective of the Learning Process in Team Sport. In R. Feingold, C. Roger Rees, G. T. Barette, L. Fiorentino, S. Virgilio, & E. Kowalski (Eds.), *Education for Life, Proceedings of the AIESEP World Sport Science Congress* (p. 52). New York: Adelphi University Press.
- Gréhaigne, J-F. (1992). *L'organisation du jeu en football*. Paris: ACTIO.
- Gréhaigne, J-F. (2009). *Autour du temps. Apprentissages, Espaces, projets dans les sports collectifs*. Besançon: PUFC.
- Gréhaigne, J.-F., Billard, M., & Laroche, J.-Y. (1999). *L'enseignement des jeux sportifs collectifs à l'école. Conception, construction, évaluation*. Bruxelles: De Boeck.
- Gréhaigne, J.-F., Godbout, P., & Bouthier, D. (2001). The Teaching and Learning of Decision Making in Team Sports. *Quest*, 53, 59-76. <http://dx.doi.org/10.1080/00336297.2001.10491730>
- Kerbert-Orcchioni, C. (1984). *Les négociations conversationnelles* (Vol. 7, pp. 223-243). Nancy: Presses universitaires de Nancy.

- Lave, J., & Wenger, E. (1990). *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK: Cambridge University Press.
- Mahut, B. (2003). *Approche sémiotique des interactions didactiques: Geste et verbe en situation d'Education Physique et Sportive*. Thèse, Besançon: Université de Franche-Comté.
- Nachon, M. (2004). *Interaction en Education Physique et Sportive: Le cas du Basket-ball. Approche des compétences sémio-langagières et construction de savoirs*. Thèse, Besançon: Université de Franche-comté.
- Roulet, E. (1987). *L'articulation du discours en français contemporain*. Pieterlen: Peter Lang.
- Searle, J. R. (1991). L'intentionnalité collective. In H. Parreth (Ed.), *La communauté en parole* (pp. 277-243). Liège: Mardaga.
- Sensevy, G. (2003). Didactique comparé. In PUR, *Dictionnaire de L'Education* (p. 37). Paris: PUF.
- Wallian, N., & Chang, C. W. (2006). Development and Learning of Motor Skill Competencies. In D. Kirk (Ed.), *Handbook of Research in PE* (Chap. 13, p. 292). London: Sage Editions. <http://dx.doi.org/10.4135/9781848608009.n17>
- Wallian, N., & Chang, C. W. (2007a). Language, Thinking and Action: Towards a Semio-Constructivist Approach in Physical Education. *Physical Education and Sport Pedagogy*, 12, 289-311. <http://dx.doi.org/10.1080/17408980701610219>
- Wallian, N., & Chang, C. W. (2007b). Sémiotique de l'action motrice et des activités langagières : vers une épistémologie des savoirs co-construits en sports collectifs. In J. F. Gréhaigne (Dir.), *Configurations du jeu, débat d'idées et apprentissage des sports collectifs* (pp. 146-164). Besançon : Presses de l'Université de Franche-Comté.
- Wallian, N., & Gréhaigne, J. F. (2002). Vers une approche sémioconstructiviste des apprentissages moteurs. In G. Carlier (Dir.), *Sion parlait du plaisir d'enseigner l'éducation physique* (p. 21). Paris: AFRAPS.
- Wallian, N., Chang, C. W., Nachon, M., Couty, B., & Gréhaigne, J. F. (2004). Student Action Reading and Meaning Attribution: Towards a Model of Interpretation Register in Game Play. In R. Light, K. Swabey, & R. Brooker (Eds.), *Proceedings of the 2nd International Conference: Teaching Sport and Physical Education for Understanding*. Melbourne (AU): University Press.
- Zerai, Z. (2008). *Apprentissage du handball chez les jeunes filles tunisiennes et françaises: apport de la verbalisation*. Thèse de Doctorat ès Sciences du Sport, Besançon: Université de Franche Comté. (Non Publiée)
- Zghibi, M. (2010). *Interactions langagières et apprentissage du football*. Thèse, Besançon: Editions Universitaires Européennes.
- Zghibi, M. (2012). *Approche sémio-constructiviste et apprentissage de jeu en football*. Sarrebruck Allemagne: Editions Universitaires Eur- opéennes.
- Zghibi, M., Guinoubi, C., Bennour, N., & Moheiddine, N. (2013). Débat d'idées et mise en œuvre des projets d'actions en jeu de Football: cas des garçons de troisième année secondaire en Tunisie. *Sport Science Review*, 22, 151-180. <http://dx.doi.org/10.2478/ssr-2013-0008>
- Zghibi, M., Sahli, H., Bennour, N., Guinoubi, C., Guerchi, M., & Hamdi, M. (2013a). The Pupil's Discourse and Action Projects: The Case of Third Year High School Pupils in Tunisia. *Creative Education*, 4, 165-171. <http://dx.doi.org/10.4236/ce.2013.43024>
- Zghibi, M., Sahli, H., Jabri, M., Ouelhezi, S., Guelmami, N., & Wallian, N. (2014). Modalités de prise de décision chez les filles et les garçons en la présence ou en l'absence de l'enseignant. *International Review of Education*, 1-19.
- Zghibi, M., Zerai, Z., & Rezig, M. (2009). Effets directs de la verbalisation sur les stratégies d'action et les prises de décisions des élèves lors d'un cycle de football. *Journal de la Recherche sur l'Intervention en Education Physique et sportive*, 16, 118-140.



Submit or recommend next manuscript to SCIRP and we will provide best service for you:

Accepting pre-submission inquiries through Email, Facebook, LinkedIn, Twitter, etc.

A wide selection of journals (inclusive of 9 subjects, more than 200 journals)

Providing 24-hour high-quality service

User-friendly online submission system

Fair and swift peer-review system

Efficient typesetting and proofreading procedure

Display of the result of downloads and visits, as well as the number of cited articles

Maximum dissemination of your research work

Submit your manuscript at: <http://papersubmission.scirp.org/>