## **GRAMÁTICA CORREGIDA**

```
Program
               ->
                       Decl'
Decl'
                      Decl (Decl' | ε)
               ->
                      VariableDecl | FunctionDecl
Decl
               ->
VariableDecl
               ->
                      Variable;
Variable'
                      Variable (, Variable' | E)
               ->
                      Type ident
Variable
               ->
                      Type' ([] | ε)
Type
                      int | double | bool | string | ident
Type'
               ->
                      Type FunctionDecl' | void FunctionDecl'
FunctionDecl
FunctionDecl'
                       ident (Formals) Stmt'
                      Variable' | ε
Formals
Stmt'
                      Stmt Stmt' | E
               ->
                      WhileStmt Stmt' | printStmt Stmt' | Expr , Stmt'
Stmt
               ->
                       while (Expr) Stmt
WhileStmt
               ->
                       Print (Expre',);
PrintStmt
               ->
Expre'
                       Expr Expre'
               ->
                       ExprM Expr'
Expr
               ->
                       && ExprM Expr' | | ExprM Expr' | ε
Expr'
               ->
               ->
                       ExprN ExprM'
ExprM
ExprM'
                              <= ExprNExprM' | <ExprNExprM' | > ExprN ExprM' | ε
ExprN
                       ExprO ExprN'
               ->
                       <mark>+</mark>ExprOExprN' | <mark>-</mark>ExprOExprN' | <mark>ε</mark>
ExprN'
               ->
ExprO
                       ExprP ExprO'
               .>
                      / ExprPExprO' | *ExprPExprO' | %ExprPExprO' | ε
ExprO'
               ->
                      Lvalue = Expr | Constant | Lvalue | this | (Expr) | -Expr | Expr | new(ident)
ExprP
               ->
LValue
               ->
                       ident | Expr.ident | Expr [Expr]
               intConstant | doubleConstant | boolConstant | stringConstant | null
Constat->
```

(Los símbolos subrayados con azul son símbolos terminales).

0       ;       Program         1       ident       Decl'         2       int       Decl         3       double       VariableDecl         4       bool       Variable'         5       string       Variable         6       []       Type         7       void       FunctionDecl         8       (       Formals         10       ε       Stmt'         11       ,       Stmt'         12       while       WhileStmt         13       Print       PrintStmt         14       &&       Expre'	
1         ident         Decl'           2         int         Decl           3         double         VariableDecl           4         bool         Variable'           5         string         Variable           6         []         Type           7         void         FunctionDecl           8         (         FunctionDecl'           9         )         Formals           10         ε         Stmt'           11         ,         Stmt           12         while         WhileStmt           13         Print         PrintStmt           14         &&         Expre'	
3       double       VariableDecl         4       bool       Variable'         5       string       Variable         6       []       Type         7       void       FunctionDecl         8       (       FunctionDecl'         9       )       Formals         10       ε       Stmt'         11       ,       Stmt         12       while       WhileStmt         13       Print       PrintStmt         14       &&       Expre'	
4       bool       Variable'         5       string       Variable         6       []       Type         7       void       FunctionDecl         8       (       FunctionDecl'         9       )       Formals         10       ε       Stmt'         11       ,       Stmt         12       while       WhileStmt         13       Print       PrintStmt         14       &&       Expre'	
5       string       Variable         6       []       Type         7       void       FunctionDecl         8       (       FunctionDecl'         9       )       Formals         10       ε       Stmt'         11       ,       Stmt         12       while       WhileStmt         13       Print       PrintStmt         14       &&       Expre'	
6 [] Type 7 void FunctionDecl 8 ( FunctionDecl' 9 ) Formals 10 ε Stmt' 11 , Stmt 12 while WhileStmt 13 Print PrintStmt 14 &&	
7 void FunctionDecl 8 ( FunctionDecl' 9 ) Formals 10 ε Stmt' 11 , Stmt 12 while WhileStmt 13 Print PrintStmt 14 && Expre'	
8 ( FunctionDecl' 9 ) Formals 10 ε Stmt' 11 , Stmt 12 while WhileStmt 13 Print PrintStmt 14 && Expre'	
9 ) Formals 10 ε Stmt' 11 , Stmt 12 while WhileStmt 13 Print PrintStmt 14 && Expre'	
10 ε Stmt' 11 , Stmt 12 while WhileStmt 13 Print PrintStmt 14 && Expre'	
11       ,       Stmt         12       while       WhileStmt         13       Print       PrintStmt         14       &&       Expre'	
12whileWhileStmt13PrintPrintStmt14&&Expre'	
13PrintPrintStmt14&&Expre'	
14 && Expre'	
·	
15 11 5.000	
15    Expr	
16 == Expr'	
17 != ExprM	
18 >= ExprM'	
19 <= ExprN	
20 < ExprN'	
21 > ExprO	
22 + ExprO'	
23 - ExprP	
24 / LValue	
25 * Constant	
26 %	
27 =	
28 this	
29 !	
30 New	
31 intConstant	
32 doubleConstant	
33 boolConstant	
34 stringConstant	
35 null	